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Railway Age

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Another Constructive Program Needed

On April 5, 1923, almost exactly nine years ago, the chief executives of the railways of the United States met in New York and adopted and announced to the public a program "to further improve transportation conditions and to make the best practicable provision to meet transportation requirements as they develop." The railway situation was regarded as bad at that time because since September 1, 1922, there had prevailed a car shortage which in the week ended October 31, 1922, reached a maximum of almost 180,000 cars and which lasted until May 14, 1923. The program then adopted for providing adequate transportation and improving service was so successfully carried out that there has never since been an inadequacy of railway transportation and that shippers have been given service entirely unprecedented in its speed and dependability. The results demonstrated in the most striking and significant way what can be accomplished by constructive cooperation by the railways—although, as their record of earnings shows, the railways themselves received the smallest share of the benefit of their achievement.

The railway situation that exists today is entirely different from that which existed nine years ago, but, in a different way, is much worse. The railways then had more traffic than they could satisfactorily handle and unsatisfactory earnings in spite of that large traffic. Ever since the end of October, 1929, they have had car surpluses which have ranged from 125,000 to almost 751,000 cars, and they have at present a surplus exceeding 720,000 cars. Owing to the unprecedented decline of traffic which has resulted in this huge freight car surplus and to other causes, the present situation of the railroad industry, in respect to unemployment, condition of physical properties and earnings, is very bad. From the standpoint of shippers wanting service it is better than nine years ago. From every other standpoint it is incomparably worse.

Why Talk—Without Acting?

Public sentiment was hostile to the railways nine years ago because of the transportation conditions that existed then. Public sentiment is very favorable to them now because of the good service they have since rendered and because the public realizes that their earning capacity must be restored and employment and purchases by them increased if they are to contribute their essential share toward a restoration of prosperity. As pressure from shippers and a hostile public sentiment were sufficient to cause railway executives to adopt a constructive program nine years ago, why should not the present railway situation and the present public sentiment be sufficient to inspire them to adopt now a constructive program to improve the railway situation in future?

The people are concerned regarding the railway situation. They ask what the railways want. Never, probably, was there a time when a definite program formulated by railway executives to solve the problems of their industry would have been received with more public interest and favor than now. Is it not becoming largely a waste of time and energy to talk to the public about the railroad problem because of the impossibility of telling the public definitely what the railways want to do for themselves or want others to do for them to help solve that problem?

The Transportation act had been in effect three years when the important meeting of the railway executives in New York already mentioned was held in April, 1923. The most important provisions of that act were those regarding wages and rates. The provisions creating a Railroad Labor Board have long since been repealed by the enactment of the Railway Labor act. Recent experience has demonstrated that the Railway Labor act is serviceable as a means of settling occasional and comparatively important wage disputes, but that it is practically valueless as a means of securing important readjustments of wages necessitated by such a period of economic upheaval as the present. Recently there has been delegated to the Interstate Commerce Commission the task of investigating the feasibility and expediency of establishing a six-hour day in railway service. These developments, together with the necessity of securing recently by voluntary action a merely temporary reduction of 10 per cent in wages, have raised anew the entire question of the method by which major labor

questions arising in the railroad industry should be settled.

Changes in Rate Regulation

Section 15-A, containing the provisions regarding rate making and recapture, is the very heart of the Transportation act. Purporting to deal with rate-making, it gives directions to the Interstate Commerce Commission as to how it shall regulate net operating income—the source from which must be derived, directly and indirectly, all the money with which to pay interest and dividends and make improvements. Excepting that of government ownership, there could not be presented to the railroad industry a question more important than that of the kind of legislation regarding regulation of its net operating income that it should favor. Nevertheless, the announcement that the general counsel of the Association of Railway Executives had agreed to the substitution of a "flexible" rule of rate-making for the provisions of Section 15-A surprised not only many well informed students of railway problems, but even many railway executives, general counsel and public relations officers. The very fact that so many of such men were taken by surprise is a significant commentary upon the way the major problems of the railroad industry are handled.

Are railway executives entirely satisfied to have given to the commission such wide discretionary authority to regulate earnings as would be given by this "flexible" rule? If legislation is to repeal the rule of the Transportation act directing the commission to so adjust rates as to give the railways opportunity to earn a fair return, should it not go much further, and deprive the commission of all its present rate-making power excepting that to prevent unfair discriminations? Confronted with outside competition on every hand, the railways are faced with very different conditions from those that existed when the commission was given in 1910 its power to suspend proposed advances in rates and later its additional present rate-making power. As a practical matter, and disregarding whether the commission is fair or not, is it reasonable to assume that any single body of men can so exercise the authority to adjust rates throughout the country as to enable the railways to meet present outside competition? Has not the time come when the entire question of regulation of rates must be reconsidered by the railways and the public?

Waterway and Highway Competition

Much is being said by railway officers in criticism of government operation of a barge line on the Mississippi river system and of large government expenditures upon inland waterways. The railways have agreed upon a policy of opposition to continued government operation of the barge line, but they have not agreed upon any policy regarding government expenditures upon inland waterways. Should they not definitely adopt a policy of opposing expenditures upon rivers and canals, which can have no effects excepting those of increasing taxes, wasting public money, and diverting traffic to more expensive means of transportation, thereby reducing railway earnings and employment?

The present competition of highway carriers is doing much harm to the railways and causing them much alarm. More than a year ago the executives adopted a program favoring withdrawal of all subsidies from other means of transportation and comparable regulation of them. Ever since then there has been controversy as to whether highway carriers actually are subsidized; and the contention that they are has been based as much upon opinion as upon evidence. The motor vehicle industry has the advantage of being supported in this controversy by the United States Bureau of Public Roads which is using data resulting from investigations made by it that many students of the subject regard as not only inconclusive, but partisan and misleading. Should not the railways provide for having the entire subject thoroughly investigated by some independent and expert agency, and then either drop the charge of subsidization or support it with convincing evidence? And what is really meant by "comparable" regulation of highway carriers, as used by spokesmen of the railways? In other words, what kind of regulation of highway carriers do all the railways, or a majority of them, or those of different territories, believe should be adopted, not merely for their protection, but in accordance with sound economic principles? Both spokesmen of the railways and regulating authorities are now seriously handicapped in dealing with highway transportation by lack of definite information and definite proposals which only the railway executives can make available.

There has been much criticism of competition between the railways from the Interstate Commerce Commission and other sources. This has related to "reciprocal buying", to the operation of unnecessary passenger service, to the granting of unwarranted privileges of various kinds to shippers, and to failure to make advances in rates on traffic upon which the commission has intimated that they should be advanced. Specific attention has been called by some members of the commission to changes in law already made authorizing reductions of competition of which the railways have failed to take advantage to their alleged detriment. Should not thorough consideration be given by the executives to the question whether and how there can be made beneficial reductions of interrailway competition?

Problems of the Industry

What is wrong with the railways, aside from the effects of the depression? If there is nothing else wrong, why continue to talk about the "railroad problem"? If there are other things that are wrong, why not make concerted efforts to remedy them? The principal thing that is wrong besides the depression is that the words "railroad industry" are, as respects measures to improve the condition of in-

dustry, almost a misnomer. There are numerous efficiently managed individual railways, but the efficiency of railway managements does not include efficiency in dealing with conditions and problems with which the railroad industry is confronted. The railroad industry was assured a "fair return" by the Transportation act, but the industry has earned an average of only about four per cent, and in 1931 earned the smallest net operating income within thirty years. We are told now by some that there is no use in trying to retain the rate-making provisions of Section 15-A because the return assured by them has never been earned, and at the same time it is implied that once the rate-making provisions are replaced by a rule giving the commission virtually unlimited discretion shippers and regulating authorities will join with the railways in an effort to provide earnings that will insure adequate transportation. These anticipations of a millennium in the relations of regulating authorities, shippers and railways may be well founded, but we still find it difficult to understand why anybody believes that the railways will get a constitutional return under a law that will not assure them such a return when they have not received it under a law that the commission has regarded as too favorable to them because it has assured them such a return.

What good does it do for each railway to be efficiently operated by its own organization if, because of neglect of the problems of the industry, the various railways composing it never earn a satisfactory return in prosperous years and in every depression approach nearer to bankruptcy and government ownership? The vital, unsolved problems of every individual railway are the problems of the railroad industry. The most ominous fact regarding the railway situation is the seeming impossibility of getting adequate co-operative consideration and action regarding such problems. The executives usually have only short and perfunctory meetings, they never have long meetings excepting to deal with emergencies, and largely in consequence no other industry has so many emergencies.

It is all very well to talk, and talk, to the public about the problems of the railroads, but those problems will never be solved any better than they have been in the past until the responsible leaders of the industry, after ample consideration, formulate definite policies for their solution, and unitedly, persistently and courageously promote their adoption both by the railways themselves and by public authorities.

Eliminating Train Stops

Rule 509-B of the A.R.A. Standard Code states that "when a train is stopped by a stop-and-proceed signal, it may proceed, etc." In a revision dated January 17, 1928, a note was added to the effect that railroads desiring to avoid stopping trains may arrange accordingly. The savings in fuel, running time, damage to equipment, etc., that can be effected by eliminating train stops at stop-and-proceed signals is appreciable and the subject bears investigation in these days of rigid economy.

For example, the Illinois Central has in effect on its lines outside the Chicago terminals, a modification of this rule reading as follows: "On two or more tracks trains may pass stop-and-proceed signals without stopping, at a speed not to exceed 15 m.p.h." These instructions have been in effect on 1,375 miles of tracks for the last two years and the results have been entirely satisfactory. A similar rule has been in effect since 1928 on the train control territory of the Rock Island, which installation now extends over 342 miles of double track between Blue Island, Ill., and Des Moines, Iowa, and on which it is reported that the results have been highly satisfactory in eliminating train stops. Similar results have, in effect, been accomplished on the automatic train control territories of the Santa Fe and the North Western where intermediate wayside signals are not used. Furthermore, numerous roads have revised the rule for certain signals on ascending grades where heavy trains cannot be started without serious delays by attaching to the signal mast an auxiliary device, known as a grade sign, and giving enginemen authority to pass such a signal at slow speed without stopping. The same type of sign is also used on signals where tracks extend through towns with numerous street crossings at grade to reduce the time during which trains block the crossings. As applied on most roads, Rule 509-B requires that a train on double track, encountering a stop-and-proceed signal, must stop and then proceed, while on single track it must, under certain conditions, be preceded by a flagman. However, if the so-called grade sign is so controlled on a single-track line as to be displayed only for following trains, as is done on the Denver & Rio Grande Western, conditions will approximate those on multiple-track lines.

In considering the modification of Operating Rule 509-B, it is well to recognize the objections that will be raised by operating officers. One reason, of course, for requiring a train to stop at a stop-and-proceed signal is to insure that the engineman is capable of stopping his train, if necessary, while proceeding through the next block. Another reason is to insure reduced speed while entering the block. However, the speed under such conditions can be limited by rule as effectively as it is done on curves, in yard limits, etc. As a matter of fact, the speed is so limited in the block under present conditions, the only difference being that the "know-nothing" stop at the stop-and-proceed signal must first be made. A close check on the Illinois Central shows that the enginemen operate their trains at even less than the 15 m.p.h. limit, because of the fact, that while at the low speed, they can readily see any train ahead within braking distance, they are governed primarily by the fear of a broken rail.

In view of the fact that some roads have found it satisfactory to eliminate these train stops at stop-and-proceed signals, and, further, that many roads have

found it satisfactory to eliminate the stops at certain signals, it would seem that the railroads as a whole might well give consideration to the advisability of modifying Rule 509-B in order to receive more extensive benefits from the practice of eliminating these needless train stops.

Decline of Travel by Rail

Perhaps no other fact more strikingly illustrates the change that has occurred in the traveling habits of the American people during the last 12 years than the fact that in 1920 the average inhabitant of this country traveled 440 miles by railway, and in 1931 only 177 miles, a reduction of 60 per cent. This reduction in travel by rail was not mainly due to the depression, because it has been occurring ever since 1920.

Forty-two years ago—in 1890—the average inhabitant made eight trips by rail, in 1920, when railway passenger business reached its peak, 12, and in 1931 only 5. The average passenger fare charged per mile amounted to 2.745 cents in 1920 and to 2.513 cents in 1931, and therefore the amount paid by the average person for railway passenger service amounted to $12.08 in 1920, and to $4.45 in 1931, a reduction of $7.63, or 63 per cent. Considered in the aggregate, this meant a decrease of $738,000,000 in passenger revenues in 1931 as compared with 1920.

The question as to what the railways should or can do to stop the losses of passenger business, and, if possible, recover some of what has been lost, is one of the most interesting and difficult with which their managements are confronted. Numerous experiments have been made, and, while some have been more or less succssful, most of them have failed. A new generation is growing up a large part of the members of which know much about travel by automobile and little or nothing about travel by rail. A suggestion which often has been made, and which seems to have merit, but which never has been adopted, has been that the railways should pool a substantial part of their advertising appropriations and carry on a nationwide joint advertising campaign presenting the advantages and attractions of travel by rail as compared with those of travel by highway.

An increasing number of railway officers are becoming convinced that it would be expedient to establish two classes of passenger fares, keeping the fare for travel in sleeping and parlor cars substantially the same as the present basic rate, and establishing a rate as low as 1½ cents a mile for travel in coaches. In some parts of the country the experiment of making a two cent rate for travel in coaches has been tried without satisfactory results, but officers of railways in other territories that have tried still lower rates believe that a 1½ cent rate for coaches would attract a large amount of business from buses and even passenger automobiles.

The number of trips made by passengers was 107,000,000 less in 1931 than in 1930. For some years following 1920 the average journey per passenger increased, indicating that it was principally short haul business that was being lost. During the present depression the average journey per passenger has been declining, indicating a decline in the number of long trips taken by rail relatively even greater than the decline in the number of short trips thus taken. In consequence, the average trip by rail is now shorter than it was 12 years ago, having been 37.94 miles in 1920 and 36.72 miles in 1931.

Highway Taxation as U. S. Roads' Chief Would Have It

Thomas H. MacDonald, chief of the U. S. Bureau of Public Roads, in testifying recently before the Senate Committee on Interstate Commerce, gave some figures disclosing his opinions as to what constitutes a fair basis for motor transport taxation. His findings were based on a study of roads, road costs and motor vehicles in Pennsylvania and reached the conclusion that fair taxation in that state would range from $46 for a one-ton truck to $276 for one of five tons' capacity. Coming from such a source these figures may possibly be accepted by many persons without inquiry as unbiased and scientific. It may, therefore, be well to examine them more closely.

In the first place, Mr. MacDonald is known for his conservative views as to the extra construction and maintenance cost of highways made necessary by heavy vehicles. The Bureau of Public Roads has made extensive tests of stresses in highways with different loads and with the various types of tires, but its opinions on the results of these tests have not to our knowledge been subjected to critical analysis. These tests have, moreover, been financed by and conducted with the co-operation of automotive interests, the Society of Automotive Engineers and the Rubber Manufacturers Association. In view of the above and the fact that the conclusions reached are at such variance with those of similar tests made by others, we may perhaps be pardoned if we postpone our acceptance of them until disinterested experts in no way connected with either the Bureau of Public Roads or the automotive industry have, after exhaustive and clearly impartial analysis, approved them. Private motorists, unfortunately, do not have the zealous champions that commercial highway users do. Otherwise they would undoubtedly insist on a careful scrutiny of tests tending to ascribe as necessary for the private automobile a proportion of road costs much higher than that generally accepted.

Secondly, Mr. MacDonald apparently restricts the added road costs which he attributes to heavier vehicles largely to those occasioned by the greater

strength and thickness of the paving. No augmentation of motor transport taxes is recommended to offset the fact that if there were no intercity bus and truck operations, fewer roads could accommodate other vehicular traffic with no more congestion than at present. Operators of these vehicles, in other words, are not being asked to pay for the additional mileage of improved highways made necessary by their operation. Buses and trucks, besides being heavier, average much more mileage per vehicle than private automobiles, but no differentiation to meet this greater use appears to be included in the MacDonald schedule excepting the gasoline tax which, on a basis of ton-mileage, bears much more heavily on light vehicles than on heavy ones. The gasoline tax, moreover, is collected from intra-city operators, as well as those who use the rural highways, thus forcing the city operators to pay a heavy share of the costs of rural highways which they do not use.

In the third place, Mr. MacDonald bases his calculation on 13,300 miles of "main roads", or only about 15 per cent of the total, which is all which he thinks should be supported by motor vehicle taxation. All other roads he classes as "land serving", to be paid for by taxes on real estate. Pennsylvania's mileage of rural roads is about 90,000, of which some 25,000 are surfaced, and of this latter total Mr. MacDonald believes motor vehicle operators should provide only about half. Owners of real estate and farm land, the value of which has declined tremendously in the past few years, may, however, have slightly different views of just what qualities distinguish a "land serving" from a truck serving highway.

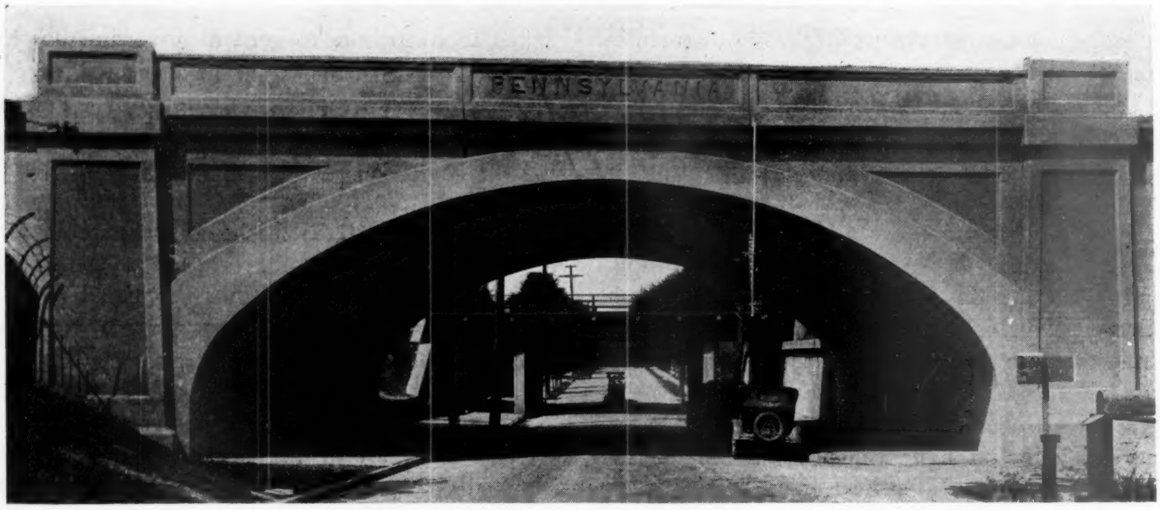
Fourth: Mr. MacDonald makes no differentiation in his tax proposals between intra-city buses and trucks and those which use the rural highways. A very considerable percentage of buses and trucks in use are operated only within the confines of cities and their suburbs. They never use the rural highways. Perhaps some of them might in justice be called upon to pay more for the use of the city streets than they do, but that is beside the question. They certainly ought not to be taxed to provide rural highways which they do not use. And if such vehicles were to be omitted from Mr. MacDonald's tax schedule, as they should be in any scheme which bases motor vehicle taxation solely on the cost of rural roads, then those remaining would have to pay a much higher tax.

Fifth: Mr. MacDonald makes no provision for taxing motor transport on the value of the public property it uses, as other industries are taxed on the property they use, to defray general governmental expenses. All collections from motor transport which he proposes and a great deal more from other sources are to be put to the direct service of the industry. If motor transport, like other businesses, had to provide its own facilities, then these facilities would be taxed for general governmental purposes. Since the government is kind enough to build the highways for motor transport, should not that industry in all fairness be asked to contribute to general governmental expenses on the basis which would be expected of it if the highways were in private ownership? The industry is now freed both from finding the capital for and paying property taxes upon an essential part of its equipment. To treat the farmer as the motor transport industry is treated, the government would have to take practically all the taxes it collects from him, plus a generous share of those collected from others, and spend them in building a barn for him and equipping his farm with modern machinery.

A great many persons believe the government has been prodigal in farm "relief"—and it has. But its activity in behalf of the farmer is a wan gesture by comparison with what it has been and is doing for motor transport—as many a farmer trying to pay 1931 taxes on Gay Nineties' prices for his products is beginning to see. There is plenty of farm land accessible by excellent roads today that is worth less than it was before the war when mud chained the farmer to his fireside for the winter. If good roads do not bring increased land values and increased incomes, where, if the solvency of land owners is to be maintained, is the money to pay for them going to come from, unless road users supply it? If road improvement is economically justifiable, then the users of road transport can afford to pay for it out of the savings arising from easier and cheaper transport. If the users cannot pay these costs and continue in operation, then the improvement is not economically justifiable and ought not to be undertaken.

Some shippers' spokesmen have suggested that the Interstate Commerce Commission is too pro-railroad in its point of view to be entrusted with the regulation of other forms of transport. Let us suppose that the commission were to urge publicly that railways be relieved of all taxes for general purposes now levied on their roadway and track and that they be indemnified for their investment in roadway and track for all but 15 per cent of their total mileage; and that the commission were to call upon the general taxpayers to assume the burdens thus cast off by the railroads and in addition to undertake the maintenance expense of 85 per cent of the railways' mileage—if the commission should make such recommendations as this, then we would concede that it showed a very strong pro-railroad bias indeed. But the commission has made no such recommendations. Instead these suggestions are simply our paraphrase of the MacDonald notion of fair treatment for the motor transport industry translated to apply to the railroads.

Mr. MacDonald's bureau, it may be well to note in this connection, is the body to which Messrs. Fulbright and Chandler, those shining champions of competition in transportation, would entrust the regulation, if any, of interstate trucks. Possibly their objection to placing other agencies of transport under I. C. C. control is their knowledge that the I. C. C. actually regulates, instead of wet-nursing, the enterprises entrusted to its jurisdiction.



A New Attitude Is Needed Toward Grade Crossing Separation

Radically changed conditions have rendered obsolete and unfair to the railroads and the public methods still used in apportioning costs

By T. J. Skillman

Chief Engineer, Pennsylvania Railroad

As a matter of sound public policy, the separation of grade crossings, which constitutes one of the most serious problems confronting the railroads today, demands more intelligent consideration than it is now receiving. The Interstate Commerce Commission apparently recognized this fact in one of its recent decisions affecting the railroads, stating the case concisely in the following words:

> The railroads, as cities expand and public highways multiply in number and use, have been and are being called upon to invest great amounts of capital in alterations of their properties which are often, from a strictly railroad point of view, very largely non-productive. The burden of these expenditures must be borne by the public in one way or another, but the question arises whether this burden is being apportioned fairly. To the extent that it is caused by other than railroad needs and does not increase the traffic of the railroads or save them expense, it may be that this burden should justly be shifted from the shoulders of railroad users.

Certainly the facts of the situation, and particularly an analysis of present methods of apportioning costs, disclose the inherent unfairness to the railroads, and, furthermore, the financial inability of the roads to meet the constantly growing demands for more grade separation. The cost alone constitutes one of the most serious problems confronting the railroads today, and, notwithstanding all of the grade separation work which has been done in the last two decades, new grade crossings, altogether beyond the control of the railroads, have been established faster than old ones have been removed.

A tremendous development has taken place in the rapid increase in motor traffic and the growing demand for improved highways. Meanwhile the various states and the federal government have endeavored to meet these changes by constantly enlarging their programs calling for the construction of high-speed highway with improved curvature and grades, necessitating not only many new grade separation projects but the revision of existing separation projects.

An equitable solution of this serious problem can be secured only by a more complete understanding on the part of the public of the changes in transportation which have taken place since the railroads were established. It also depends upon the intelligent consideration of the railroads' position with respect to grade crossing separation, occasioned by the rapid growth of highway development and improvement, and the resultant increase in highway traffic.

The position of the railroads has changed from that of the recognized sole agency of transportation to that of one of several agencies; yet they are still the backbone of the nation's transportation system, without which the country could not be prosperous. This change has been due largely to state and federal-aid highway development, the extension of waterways with federal aid, and the tremendous increase in all types of motor traffic.

When the period of railroad building started more than a century ago the principal means of transportation were afforded by canals, roads and trails. As a matter of fact, as the interior of the country was opened up these were the only methods of communication. The roads and highways were ahead of the railroads in many cases, and, as the railroads were extended they crossed these roads at grade, there being no problem of grade separation considered at that time.

For many years the problem of grade separation was

one which belonged to the railroads. Demands were very moderate. The railroads were the recognized sole transportation agency and could readily meet the demands out of their funds, and, more particularly so, as the roads were then tributary to the railroads in the delivery of traffic. The benefits of grade separation affected a very restricted community, as travel by road was limited in its range and was confined to the local community in which the separation took place. Furthermore, the states, counties and municipalities had limited funds and could not participate in the cost of grade separation work or in highway development and improvement without undue hardship upon the inhabitants in the locality affected.

Contrast this picture with the present: For the most part states are now provided with almost unlimited sources of funds for the improvement of highways, and, as a result, the range of highway communication has been extended to an equality with rail transportation. Nowadays the benefits of grade separation have passed beyond the realm of the local community into interstate communication, while the source of funds available to the railroads has been reduced materially not only by the tremendous program of the states in highway construction and improvement, but also by the loss in revenue due to increased highway usage.

Facts Must be Given Consideration

This brief outline of the fundamental changes that have occurred in the relationship of the railroads to highways is at least indicative of certain definite factors which should be considered in any reasonable review of the grade separation problem. In the first place, there are approximately 26,000,000 motor vehicles in the United States, which are capable of carrying the entire population of the country at one time. This very fact, that motor vehicles have become so commonplace, has created a demand for new facilities and means a further increase of highway transportation.

At present there are approximately 240,000 grade crossings in the United States, or about one for each mile of railroad line. No one knows what it would cost to eliminate all of these grade crossings, but estimates based on experience range all of the way from $12,000,000,000 to $20,000,000,000. The latter figure is nearly equivalent to the estimated total cost of the railroads of the country after more than 100 years of development.

Grade crossings are being eliminated at the rate of about 1,300 a year, but, in spite of this, the aggregate of remaining grade crossings is increasing from 500 to 800 each year. In other words, because of highway extension programs, new grade crossings are being created faster than the old grade crossings are being eliminated.

The elimination of grade crossings throughout the country represents the expenditure by the railroads of approximately $30,000,000 annually. It is estimated that another $30,000,000 is expended for such work by the public through state and municipal governmental agencies. Whereas the railroads' share of financing must be provided out of capital funds and thus becomes a direct charge against operating costs, state and municipal expenditures are made from revenue towards which the railroads in many instances contribute.

Lastly, from the standpoint of railroad investment, the expenditure of $30,000,000 annually represents the interest at 5 per cent on $600,000,000 capital, and is equivalent to the annual wage bill for approximately 16,000 railroad employees. In terms of operation, the railroads would have to carry one ton of freight 3,000,000,000 miles, or transport one passenger 1,100,000,000 miles to earn $30,000,000 in annual gross receipts.

In a few states, the railroads still bear the entire cost of removing an existing grade crossing or of separating the grades when a new highway is built over an existing railroad line. In most states, however, it is customary to divide the costs of eliminations between the railroads and the public.

As a necessary operating condition railroad trains have undisputed right of way over grade crossings. Any cost of highway protection borne by the railroads which can be ended through grade separation represents to that extent an actual benefit to the railroads, but unless alinement and grades can be improved or some other advantage obtained, the separation of grade crossings does not benefit the railroads in any degree commensurate with its cost. In fact, from the standpoint of the railroads there are a number of distinctly negative factors involved. No additional revenue is produced. The quality of service is not perceptibly improved. Capital investment is increased with a consequent increase in taxes and fixed charges. Structural maintenance costs are increased, as are also the costs of future improvements.

Those who use the highways, however, derive positive benefits through elimination of possible delays and the assurance of greater safety. Operating costs for commercial vehicles on the highways are thereby reduced.

The crux of the present difficulty over grade crossing separation is in financing this work on a basis that is thoroughly sound and fair to the railroads and the public. As the Interstate Commerce Commission has pointed out, the question is of vital concern to the public because it is the public that must pay, either in the form of governmental revenues on the one hand, or through transportation rates and decreased returns on its investment in railroad securities when the undue burden is imposed on the railroads.

Present Apportionment of Costs is Unfair

There can be no question that the railroads in recent years have had to pay an increasingly unfair share of the cost of these public improvements. This burden constitutes a drain on railroad resources altogether out of proportion to the benefits derived by the railroads themselves. If this injustice is to be corrected there must be a thorough overhauling of some of the old conceptions concerning grade crossing separation. Many of these ideas are fallacious and thoroughly out of date because they do not recognize that the old basis of financing grade separation projects has been completely upset by the rapid increase in highway traffic. When the railroads were built, of necessity crossing existing highways, the highways, being there first, naturally had prior rights of consideration when the question of costs was considered. Under these circumstances the railroads accepted a fair share of the expense of grade separation work. In these early days, however, highway traffic was light and the effects of grade separation were entirely local.

Now the picture is completely reversed, but the costs are not being applied fairly to either the public or the railroads. In most cases where grade separations are planned the railroad now has the right of priority. Highway traffic has increased enormously and it is obvious that those who use the highways gain far more from grade separation than do the railroads. Furthermore, these benefits are no longer restricted but extend far beyond local communities and even state boundaries. If, in the past, the major costs were allotted to the railroads, it would now seem logical and fair, when conditions are reversed, to have this burden borne not by the railroads or by the local communities, but largely by those benefiting by the change and, eventually, by the

states themselves. This would mean an equitable distribution of costs between local, state or federal governmental agencies, depending upon the location of crossings and the benefits resulting from grade separation.

Studies made by the Pennsylvania railroad show that at 1626 representative crossings selected for special observation, the units of highway traffic over the crossings exceeded the number of trains by a ratio of 34 to 1. Also, that at 45 important crossings this ratio was nearly 200 to 1. Undoubtedly, the present ratio is even greater because of the continued rapid growth of motor traffic.

Guides to a Fair and Sound Policy Offered

While there is probably no single formula that can be applied generally in the financing of grade crossing separation work, experience and careful study over a period of years point to several fundamental principles as a guide for a sound public policy. Briefly, these would provide:

(1) That in respect to state or federal aided highways, only such costs of grade separation work should be allotted to the railroads as can be justified by the benefits derived directly by the railroads from this work.

(2) That railroads be released from any share of the costs of separating grade crossings on a *new* state or federal highway provided they bear the expense of caring for their own traffic during such construction.

(3) That the railroads should not be required to pay taxes on the amount of their investment in or on the valuation of highway grade separation projects.

(4) That when the separation of an existing highway grade crossing results in improvements of the highway, such as a change in alinements, or increased width or reduced grade, the cost for such additional improvements should be deducted from the total cost of the project in determining the aggregate costs in which the railroad should participate.

(5) That the railroads should not be obliged to pay any part of the cost of reconstructing an existing grade separation constructed originally to meet all demands of safety, unless some substantial or unusual benefit to the railroads in question can be shown, as the reconstruction is entirely for the newcomers, the automobile and truck.

On the basis of these principles it should be possible for the railroads and highway authorities to allocate equitably the costs of specific grade separation projects. In case of disagreement, the matter might be referred to the state public service commission or to some other authorized body for review and judicial determination. When arbitration is invoked, the findings should be based upon a thorough examination of the project with reference to the following factors:

(1) Character and location of the highway—Whether federal or state aid; whether in densely or sparsely settled territory; or whether in entirely new territory.

(2) Character of the railroad and traffic operating over it—Whether high-speed, main-line tracks with a considerable volume of traffic; whether secondary main line with a fair volume of both kinds of traffic, freight and high-speed; or whether unimportant side line with only occasional traffic.

(3) Ratio between highway traffic units and railroad trains.

(4) Any and all other conditions submitted in each particular case by the parties interested, and particularly those bearing on the benefit or lack of benefit to the railroad.

Considering the question of grade separation in its practical aspects, it is obvious that there needs to be a new attitude and a fresh approach toward this important problem. It has been obscured to such an extent that serious injustices have grown up. These ought to be corrected in all fairness to the railroads and to the public, which, after all, has the most to gain from a thoroughly sound solution of this problem.

Freight Car Loading

WASHINGTON, D. C.

REVENUE freight car loading in the week ended March 19 amounted to 584,634 cars, the highest total for any week this year and an increase of 9,153 cars as compared with the week before. As compared with the corresponding week of last year this was a decrease of 156,619 cars and as compared with 1930 a decrease of 290,751 cars. Coal loading, however, showed an increase of 3,096 cars as compared with the corresponding week of last year, although a decrease of over 10,000 cars as compared with the week before. Miscellaneous freight showed an increase of 13,000 cars as compared with the week before and grain, coke, ore, and merchandise showed increases. The summary, as compiled by the Car Service Division of the American Railway Association, follows:

Revenue Freight Car Loading

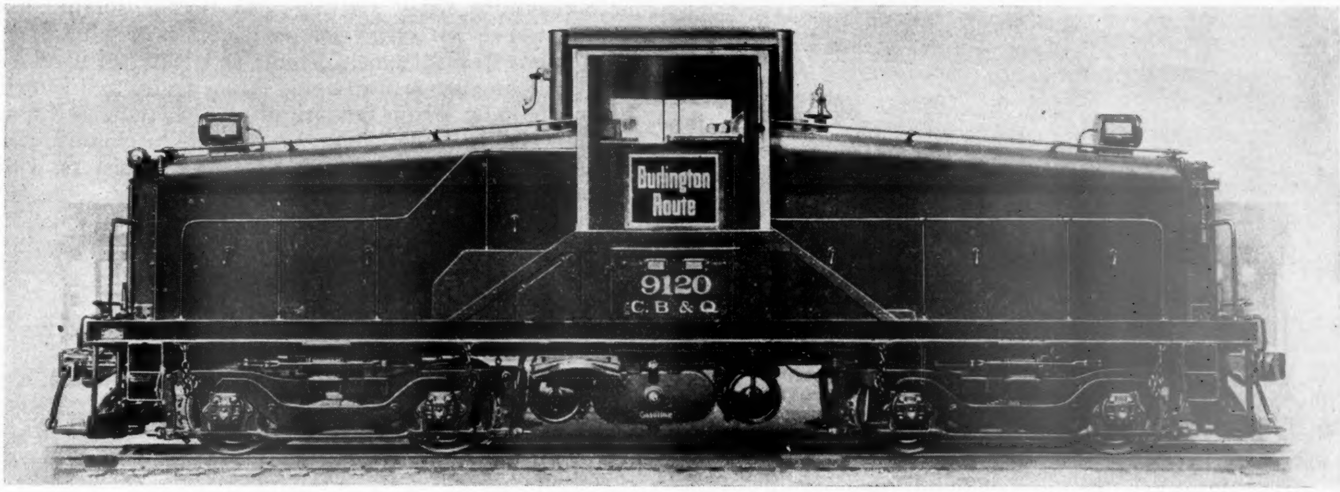
Week Ended Saturday March 19, 1932

Districts	1932	1931	1930
Eastern	138,138	167,804	199,441
Allegheny	116,633	151,754	180,089
Pocahontas	39,764	42,188	46,842
Southern	89,899	122,785	142,042
Northwestern	66,907	86,392	108,087
Central Western	85,290	107,987	125,459
Southwestern	48,003	62,343	73,425
Total Western Districts	200,200	256,722	306,971
Total All Roads	584,634	741,253	875,385
Commodities			
Grain and Grain Products	29,867	38,624	37,657
Live Stock	16,179	21,449	21,241
Coal	131,067	127,971	126,819
Coke	6,839	7,995	9,700
Forest Products	20,307	33,950	58,400
Ore	3,267	5,916	10,043
Mdse. L.C.L.	187,196	222,227	251,445
Miscellaneous	189,912	283,121	360,080
March 19	584,634	741,253	875,385
March 12	575,481	733,580	881,308
March 5	559,439	723,215	873,716
February 27	535,498	681,221	899,498
February 20	572,606	713,156	827,560
Cumulative total, 11 weeks	6,234,754	7,905,378	9,608,105

Car Loading in Canada

Car loadings in Canada for the week ended March 19 amounted to 43,580 cars which was an increase over the previous week of 1,841 cars. The index number for total loadings was 72.94 as against 70.92 for the tenth week and 70.25 for the ninth week. Merchandise loading showed an increase of 484 cars and the index number rose from 84.60 for the previous week to 87.25, which, however, was still below the index numbers for the sixth, seventh, eighth and ninth weeks. Compared with loadings for the eleventh week in 1931, total loadings were down by 4,637 cars, a decrease of 5,839 cars in the eastern division and an increase of 1,202 cars in the western division.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada		
March 19, 1932	43,580	24,061
March 12, 1932	41,739	21,311
March 5, 1932	41,829	22,916
March 14, 1931	48,217	28,758
Cumulative Totals for Canada		
March 19, 1932	453,984	235,339
March 14, 1931	508,759	302,684
March 15, 1930	623,536	404,844



Whitcomb 60-ton Gas-Electric Locomotive
Recently Delivered to the Burlington

Sixty-Ton Gas-Electric Locomotive Tested on the Burlington

Demonstrates capacity to break up a freight train in a classification yard or handle a mixed train in road service

As a result of satisfactory experience with two smaller gas-electric switchers, the Chicago, Burlington & Quincy ordered, a few months ago, a 60-ton, 450-hp. locomotive from The Whitcomb Locomotive Company, Rochelle, Ill. This locomotive, recently delivered to the Burlington, was developed by Whitcomb with the co-operation of The Baldwin Locomotive Works and the engineering staff of the railroad in an effort to produce the most generally satisfactory power unit for light switching, terminal and mixed-train work. The locomotive is designed to develop a maximum tractive force of 40,000 lb. and will be used eight hours a day, except Sunday, in light yard switching service at Nebraska City, Neb. It is also designed to operate at speeds up to 40 m. p. h. and will be used the other 16 hours each day in combination passenger and freight service between Nebraska City and Payne, Iowa, a distance of six miles. The locomotive will be given necessary inspection and conditioning work once a week, on Sundays, during the period when no switching is required. It is anticipated that this locomotive will perform the work formerly requiring at least the part time use of three steam locomotives and crews.

Demonstration on the Chicago-Aurora Division

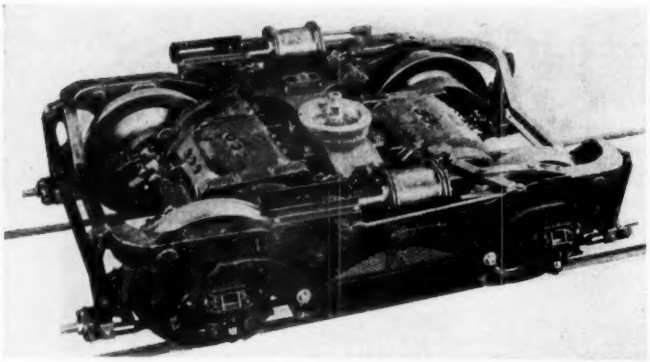
Before being delivered to its destination in Nebraska, the locomotive was given a demonstration test on the Chicago-Aurora division of the Burlington, the test being witnessed by about 90 railroad and supply-company representatives who had been invited to attend. The demonstration took place Thursday, March 10, and comprised, first, a test in switching service at Clyde yard, Clyde, Ill., in which the Whitcomb locomotive was used for breaking up a time-freight train. This is a gravity yard in which the cuts of cars have to be pulled over a 1.25-per-cent grade, being switched back into the yard over a 0.6-per-cent grade. The first cut comprised eight cars of coal, or 650 tons, four switches being made. The second cut comprised 17 merchandise cars, 798 tons, 14 switches being made. A total of 18 moves was made, handling 1,448 tons, in 40 minutes.

The second part of the demonstration consisted of operation of the gas-electric locomotive in main-line service with two passenger cars, or 120 tons trailing load, between Cicero, Ill., and LaVergne, 2.2 miles on straight, level track. During this run, a maximum speed of 37 m.p.h. was attained, the maximum acceleration being 0.75 miles per hour per second.

In the third part of the test, the gas-electric locomotive hauled a mixed train, consisting of two coaches, two loaded coal cars and one caboose, or a total trailing load of 275 tons, from LaVergne to Downers Grove, Ill., a distance of 12.1 miles with a gradually-ascending grade averaging about 0.25 per cent for 10 miles and a descending grade averaging 0.29 per cent the remainder of the distance. The maximum speed was 30 m.p.h. on the ascending grade and 37 m.p.h. on the descending grade. The elapsed time from LaVergne to Downers Grove was 29 min., the average speed being 25 m.p.h.

On the run from LaVergne to Downers Grove, 25 gallons of gasoline were used, the fuel consumption, therefore, being at the rate of 0.48 miles a gallon. Previous experience with this gas-electric locomotive in yard switching at Aurora, Ill., shows that, in such service, it consumes about 11 gallons of gasoline an hour.

The Whitcomb gas-electric locomotive is notable for

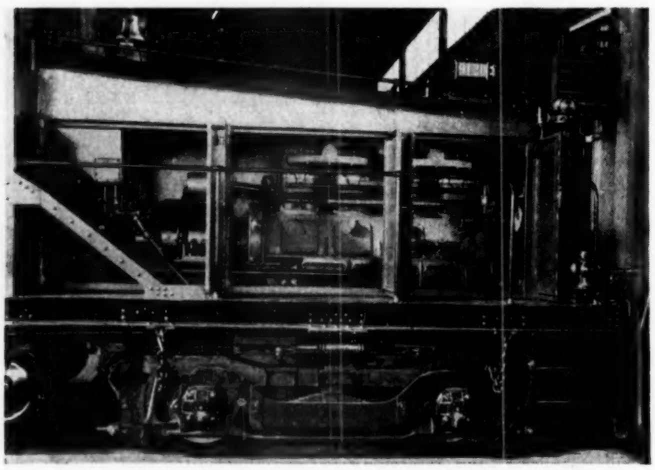


View of Locomotive Truck Showing Motor Mounting and Application of Simplex Clasp Brakes

rugged construction to meet railway requirements; accessibility for inspection, repairs and operation; compactness, simplicity and convenience of all controls; excellent visibility from the dual-control stations; freedom from noise, vibration and fumes; and conformity with all I.C.C. and A.R.A. requirements.

As shown in the illustrations, all of the weight of the locomotive is carried on two swiveling 4-wheel trucks which assure easy negotiation of relatively short curves. The locomotive weight is approximately 120,000 lb.; overall length, 40 ft. 6 in.; truck centers, 21 ft. 6 in.; and total wheel base, 28 ft. 2 in. Power is supplied by two Climax Blue Streak, eight-cylinder engines with 6-in. bore and 7-in. stroke, each developing 225 gross hp. at 1,200 r.p.m. and 200 net hp. at the rails, which are directly connected through flexible couplings to Westinghouse 184-A-4 generators. The trucks have Commonwealth frames with integral bolsters and end members, double drop equalizers forged out of the solid, semi-elliptic leaf springs, Fafnir-Melcher roller bearings and Standard Steel Works rolled steel wheels and axles. Each truck carries two Westinghouse 562-E-6 railway motors with nose suspension supported by springs both up and down.

American Steel Foundries Simplex unit-cylinder clasp brakes are used, with Westinghouse No. 6-ET equipment and deadman control. Each truck carries two air-brake cylinders mounted on the truck frame, thus eliminating all foundation brake rigging (except hand brake) and leaving the underside of the locomotive unusually clear for inspection and maintenance. A weight-transfer compensation feature on the truck is provided to compensate for traction-motor and center-plate reactions when starting heavy loads so that one pair of wheels on each truck will not start spinning.

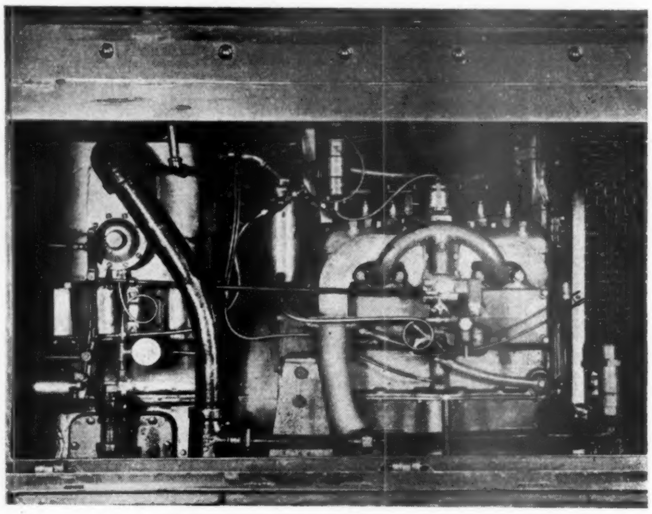


View Illustrating Accessibility of Engine and Generator Unit for Inspection and Repairs

The underframe, which is built of riveted and welded structural members thoroughly braced and reinforced, is exceptionally strong and rigid, and at the same time light in weight. The center sill is built to comply with A.R.A. buffing-load requirements. The bolsters, side sills and end sills are so designed as to permit the entire locomotive to be supported on diagonally-opposite jacking pads without damage or perceptible distortion.

Each power plant, consisting of engine and generator, rests on a cast-steel unit bedplate, which is securely bolted to the center sill and is arranged to give ready accessibility to all working parts.

The entire locomotive has been designed with accessibility in mind. The hoods are roomy enough to permit work to be done around the engines, and they have large swinging doors suitably located, and extension light outlets within. The Westinghouse RVW air compressor, independently driven by a Ford Model-A engine, is beneath the cab, reached both through a trap door in the floor and through an outside door in the side wall of the cab which exposes the whole assembly at a convenient height to be serviced from the ground. Bracing angles beneath the underframe have been specially placed so as to permit convenient access to the motors and truck parts. All electrical contactors, switches, fuses, etc., are in enclosed cabinets mounted in the cab readily accessible to the operator.



Westinghouse Air Compressor Independently Driven by a Ford Model A Engine

The cab has been designed especially for the comfort and convenience of its single occupant, and is small and compact, but uncluttered. It is insulated from heat and cold, carpeted with heavy linoleum and provided with two automotive-type hot-water heaters. There are two control stations, at diagonally-opposite corners, from which the operator has exceptional visibility. Two Pyle-National headlights are provided, one at each end of the locomotive; also, a full complement of classification and marker lamps. Instrument lights in the cab are arranged to provide general cab illumination, when desired.

In actual performance, the locomotive has exceeded its calculated tractive force of 40,000 lb. at starting, 19,000 lb. at 5 m.p.h., 11,500 lb. at 10 m.p.h., and 8,000 lb. at 15 m.p.h. It will operate under load at speeds up to 40 m.p.h., the maximum drifting speed being 50 m.p.h.

"The Fastest Freight Train"

Cotton Belt "Blue Streak" sets pace for rapid merchandise deliveries—Railroad's enterprise rewarded by increasing traffic

IN recent public addresses, officers of the St. Louis Southwestern have advocated, as one means of meeting motor truck competition, the operation of high-speed merchandise freight trains, co-ordinated with motor truck service, to provide over-night deliveries from store door to store door between distant points. They have put their ideas to the test on their own railway where the "Blue Streak," widely known as "the fastest freight train in America," connects St. Louis, Mo., with Memphis, Tenn., Little Rock, Ark., Texarkana, Tex., and Shreveport, La., with over-night service. As a high-speed freight train, the "Blue Streak," in order to maintain its scheduled overall speed of approximately 40 m.p.h. is unable to stop at more than a few points. Motor truck schedules co-ordinated with the train schedules, however, extend the fast service offered by the train to local points along the main and branch lines.

The "Blue Streak" represents the most striking effort by the Cotton Belt to recover merchandise traffic which has been lost to competitive motor trucks. It has succeeded in this purpose to an encouraging extent. The train was placed in service on October 1, 1931. In the previous month, merchandise traffic handled by the Cotton Belt to points now served by the "Blue Streak" was only 71.1 per cent of that handled in the same month of 1930, while merchandise traffic to points not now served by the train was 76.8 per cent of the volume in September, 1930. In October, the first month of operation of the train, merchandise traffic to "Blue Streak" points was 95.9 per cent of that of 1930, while the traffic to other points was only 78.4 per cent of the 1930 traffic. In November, 1931, the "Blue Streak" leaped ahead. In that month merchandise traffic to points not served by the train was only 88 per cent of that handled in November, 1930, while merchandise traffic to "Blue Streak" points was 135.5 per cent of that handled in November, 1930. In December, 1931, merchandise to "Blue Streak" points was 109.3 per cent of that handled in December, 1930, while the percentage to other points was 86.9 per cent of the 1930 figure.

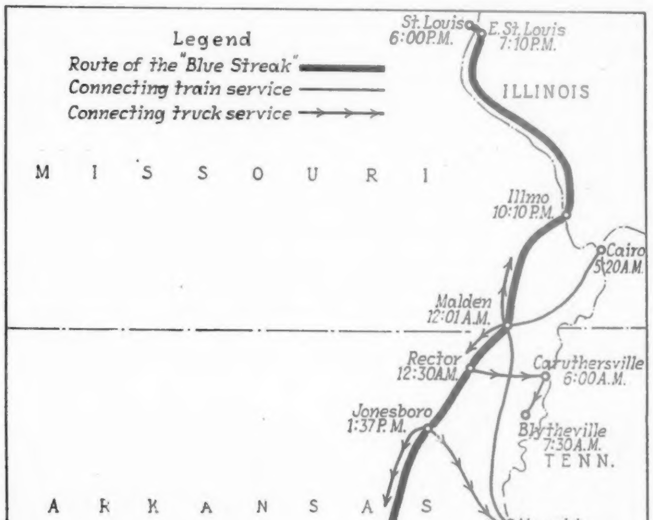
Competition Changes

The establishment of the "Blue Streak" was the result of a survey made by the Cotton Belt last fall, which showed a well-defined tendency for motor trucks to operate over much longer distances than they had previously done. Seventeen truck lines were found to be operating out of St. Louis to points in the territory served by the Cotton Belt. These generally made over-night deliveries from St. Louis to such cities as Memphis, Tenn., and Little Rock. It was apparent that the pick-up and delivery service, which became effective on all Southwestern lines on October 1, would not effectively meet the existing highway competition unless delivery at destinations, such as Memphis and Little Rock or any other points reached by over-night truck service, when moving by rail in connection with the new pick-up and delivery service, could be effected as promptly as that by highway. To meet the need for prompt delivery, the "Blue Streak" came into existence.

From Illmo, Mo., to Pine Bluff, Ark., it is scheduled as a first-class train and makes the run from the Cotton Belt's East St. Louis terminal to Pine Bluff shops, a distance of approximately 398 miles, in 10 hrs. 5 min. No carload freight is handled on this train, and on account of the speed at which it must operate between stations, passenger locomotives are employed. During January an average of approximately 15 cars per day were handled on the "Blue Streak," but re-adjustments which are being made are expected to increase the train to 20 or 25 cars per day.

Unusual Maintenance

On account of the fast schedule, only the best freight cars are permitted to be used in the train, and these are subjected to an unusually careful inspection. The best cars available for merchandise loading are selected in the East St. Louis yards for preparation for the following day's loading at Florida Street station in St. Louis. Special inspection is made of all journals, brasses and wedges. Oil boxes are repacked with new oil and new waste. On an average, each car so prepared requires three journal wedges and four brasses. Oil boxes are



The Route of the "Fastest Freight Train"

also carefully inspected for loose and worn-out box bolts. Seven box bolts per car are renewed on an average. Grip nuts are applied to all box bolts when these are found missing. Careful inspection is made of all brake beams, and an average of two brake beams per car are applied. The cars are equipped with one-inch, solid-eye brake hangers and 1¼-in. brake hanger key bolts. Flat split keys, ¾ in. by 3½ in., are used in the key bolts.

The cars are jacked up at both ends for the inspection of center plates and center pins, and side bearings and center plates at both ends are oiled. Air brakes are cleaned at intervals of nine months, instead of the usual cleaning once a year. Thorough inspection is made of couplers and draft gear, and care is taken to see that the brake beam safety irons are in good order. Side doors are carefully inspected and, when necessary, are repaired to make sure that they will be in good working order so that delays will not be incurred in getting them open. In packing oil boxes, special care is taken not to place the packing so high as to create a hazard of waste grab when cars are operated at high speeds over frogs, switches and railroad crossings. The wheels are closely inspected and any that are not in first-class condition are replaced.

Following these preparations, the cars are marked with a tag stamped "Special," indicating that they are not to be used in any service except that of the "Blue Streak." Since the train was started on October 1, there has been only one hot box on this train, which caused a delay of 11 min. at Ford, Ill., 10 min. at Raddle Junction, and 16 min. at Illmo.

Operating Procedure

Cars for the southbound "Blue Streak" are spotted in station order at the Florida Street station in St. Louis, Mo. At 6 p.m. when their loading has been completed and they have been sealed, the cars are pulled from the station by a switch engine, and are taken to Valley Junction in East St. Louis. At this point the road engine is waiting. The switch engine is uncoupled from the freight cars, and while the road engine is backing down to the train, the switch engine places the caboose at the rear end. All steps in the operation are carried out without waste of time, as they have to be because the schedule calls for departure from Valley Junction at 7:10 p.m. The first stop south of East St. Louis is Illmo, where the train arrives at 10:10 p.m., and leaves at 10:15 p.m. After stops at two intermediate points, Jonesboro, Ark., is reached, where an eight-minute stop is made, between 1:37 a.m. and 1:45 a.m. After a stop at Stuttgart, Ark., at 4:25 a.m. the train reaches Pine Bluff at 5:15 a.m. for a 15-min. stop. At this point the "Blue Streak" becomes a tonnage train. Proceeding on its schedule, it reaches Lewisville, Ark., 528 miles from St. Louis, at 10:10 a.m. At this point cars for Shreveport, La., are cut out. They arrive at Shreveport, 590 miles from St. Louis, at 12:50 p.m. The remainder of the train, proceeding from Lewisville, arrives at Texarkana, 558 miles from St. Louis, at 11:45 a.m.

The "Blue Streak's" Schedule

P.M.		Station	Miles
6:00	Lv.	St. Louis, Mo., Florida St.	0
7:10	Lv.	E. St. Louis, Ill.	5.7
10:10	Arr.	Illmo	132.6
10:15	Lv.	Illmo	....
12:00	Arr.	Malden, Ark.	197.0
12:30	Arr.	Rector	224.7
A.M.			
1:37	Arr.	Jonesboro	263.9
1:45	Lv.	Jonesboro	....
4:25	Arr.	Stuttgart	372.4
5:15	Arr.	Pine Bluff	402.6
5:30	Lv.	Pine Bluff	....
7:03	Arr.	Fordyce	445.9
8:15	Arr.	Camden	476.0
10:10	Arr.	Lewisville	528.0
11:45	Arr.	Texarkana, Ark.	557.9
P.M.			
12:50	Arr.	Shreveport, La.	590.1

The original northbound schedule of the "Blue Streak" called for departure from Pine Bluff at 8:00 p.m., and arrival at East St. Louis at 7:45 a.m. Soon after the train was established, however, it was found possible to consolidate this schedule with the schedule of one of the Cotton Belt's fast northbound perishable trains, so that the power used on the "Blue Streak" is now utilized on this train. This has resulted in the elimination of extra train mileage, both northbound and southbound, on account of the "Blue Streak." Necessary adjustments in the connecting truck service were made to take care of the change of operation on the northbound schedule, so that exactly the same service is given now as was given on the original schedule, except that first-morning delivery from the south into St. Louis is not offered. The schedule of the perishable train puts that train into St. Louis shortly after midnight. The distribution service out of Memphis to all other points in Arkansas and Missouri, however, has remained the same.

Connecting Truck Service

By means of connecting rail and truck service, the speed in freight delivery accomplished by the "Blue Streak" is offered to all points on the Cotton Belt between St. Louis on the north and Shreveport and Texarkana on the south. At each of the stopping points of the train, cars with freight consigned to these and nearby stations along the main and branch lines are set out for unloading and for the transfer of their cargoes to waiting motor trucks. The cars are unloaded immediately upon their arrival at each of the set-out points, and generally the contents are forwarded promptly by truck. In one or two cases, however, in order to conserve truck mileage and at the same time to make connections, the trucks are held for the latter.

The first cars are set out at Malden, Ark., 197 miles from St. Louis. A northbound truck leaves Malden at 10 a. m. and reaches Dexter, on the main line to the north, at 10:55 a. m., with "Blue Streak" freight for that point. A connecting rail motor car leaves Malden at 3:10 a. m. with freight for Cairo, Ill., and arrives at Birds Point (West Cairo) at 5:20 a. m.

The next point at which cars are set out is Rector, Ark. One connecting truck schedule, which serves Caruthersville and Blytheville, calls for departure from Rector at 3 a.m. This truck affords delivery at Caruthersville at 6 a.m. and at Blytheville at 7:30 a.m. Another truck works northward along the main line between Rector and Malden, this one leaving Rector at 7:15 a.m. and arriving at Malden at 9:45 a.m.

The next set-out point is Jonesboro. One truck works northward along the main line, leaving Jonesboro at 5 a.m., arriving at Paragould, Ark., at 6:10 a.m., and finishing its run at Rector at 7 a.m. Another truck proceeds southward along the main line, leaving Jonesboro at 10:45 a.m. and arriving at Brinkley, Ark., at 1:45 p.m. Freight for Memphis leaves Jonesboro by truck at 4 a.m. This truck reaches Truman, Ark., at 4:45 a.m. and Memphis at 6:45 a.m.

With loads transferred from the cars set out at Stuttgart, trucks operate northward, southward, eastward and westward from that point. A westbound truck leaves Stuttgart at 4:25 a.m. and arrives at Little Rock at 7 a.m. The northbound truck serving main line points leaves Stuttgart at 5:15 a.m. and arrives at

Brinkley at 8 a.m. The southbound truck for main-line points leaves Stuttgart at 5:35 a.m. and arrives at Pine Bluff at 8:30 a.m. The eastbound truck leaves Stuttgart at 7:30 a.m. and finishes its run at Gillett at 10 a.m.

The other intermediate set-out points are Pine Bluff and Camden. A westbound truck leaves Pine Bluff at 7 a.m. and, after serving intermediate points, arrives at Little Rock at 10 a.m. A southbound truck operating along the main line leaves Pine Bluff at 10 a.m. and arrives at Camden at 3:30 p.m. At Camden, a southbound truck operating along the main line leaves at 10 a.m. and runs through to Texarkana, arriving there at 5:30 p.m. "Blue Streak" freight consigned to points west of Texarkana, the westward end of the train's run, is handled in a westbound truck which leaves Texarkana at 1 p.m. for main-line points, completing its run at Mt. Pleasant, Tex., at 5:45 p.m.

Coal Producers Testify on Railway Fuel

See disastrous results from government interference—Galloway firm on B. & O. price policy

HEARINGS on railway fuel practices, which have been conducted by the Interstate Commerce Commission in various cities since last fall, were concluded in Chicago, for the present at least, on March 25, after testimony was heard from spokesmen for coal producers in West Virginia, Ohio, Indiana and Illinois, headed by J. D. Battle, traffic manager of the National Coal Association. Fuel practices on the Chicago & North Western, and further facts regarding practices on the New York Central lines and the Baltimore & Ohio were also presented last week. The operators were questioned especially as to their views on the effects of requiring the railroads to purchase fuel on the basis of specifications and competitive bidding, and also the effect of requiring periodical statements of coal purchases to be filed with the commission.

Production Costs Given

L. G. Wood, president of the Crystal Block Coal Company, stated that it cost $1.67 to produce coal in the Williamson district of West Virginia in 1930 and $1.51 in 1931, based on figures obtained from active mines, allowing approximately 11 cents per ton for royalty and depletion, 15 cents for depreciation and 18 cents for interest. These costs do not include a selling expense of 8 per cent.

He attributed the downward trend of prices to overcapacity, in the face of fuel economies by consumers and competition from substitute fuels, aggravated by activities of "snow-bird" operators with no investment to protect and no scruples about reducing wages of employees. He considered that the price-cutting tactics of some railroads tend to lower prices by forcing operators either to sell coal below production costs in order to maintain an economical rate of operation or close down the mines and throw labor out of work. The operators favor yearly contracts for railroad fuel because they assure a definite tonnage with which to stabilize operations.

Allocating coal orders on the basis of traffic does not benefit the operator, he said, if made through brokers in that this fails to assure the operator of the tonnage, encourages spot purchasing and further depresses the operator's income by the amount of the commissions paid. It is his opinion that competitive bidding would result in reducing the prices paid for the coal, but that the filing of public records of railway coal purchases every three months with the commission would have no effect on prices, nor embarrass the operators, since such information is already available.

It was deduced from Mr. Wood's testimony that coal is more often sold below than above the cost of production at the present time in West Virginia, and that the difference between the prices that the railroads pay for coal and those paid for commercial coal sometimes means the difference between profit and loss to the operator. Confining orders for railroad fuel to operators with large amounts of commercial traffic tends to force the small operator either to cut his price or go out of business.

Kanawha Costs

Costs of production of active companies producing 74 per cent of the total output of the Kanawha district of West Virginia were $1.51 per ton in 1930, exclusive of 8.18 cents per ton for sales expense and 18 cents for interest on investment, and $1.47 per ton on the same basis, in 1931, according to A. O. Wilson, statistician of the operators in the Kanawha district. The variation in one mine's production cost from $2.30 per ton, when producing 7,000 tons per month, to $1.61, when the production was 15,000 tons, was reported as illustrating the effect of increased output on production costs. When told that some railroads had abandoned coal contracts because producers had refused to live up to them, Mr. Wilson contended that the legitimate operators were not the ones at fault. He considered that the little operator should have the same chance to sell coal as the big operator.

The production costs of eight commercial coal companies in the Eastern Ohio field, producing 60 per cent of the field's output in 1931, excluding captive mines and strip-coal producers, were $1.11 per ton on cars, or $1.50 with fixed charges and sales expenses added, according to D. F. Hurd, secretary of the Eastern Coal Operators' Association.

Operators Oppose Interference

Both Illinois and Indiana operators opposed any disturbance of the present relationship between the operators and railroads, and took the position that competitive bidding, without regard to traffic considerations and mine operating conditions, would be disastrous to the railroads, the coal industry and the public. Average production costs were $2.118 in the Southern Illinois field and $2.032 in Central Illinois in 1931, including the carrying charges of idle properties, while cost of production in Indiana was $1.80 per ton.

The greater cost of Illinois coal over that produced in other fields, despite the unusual development of me-

chanical handling in Illinois, was attributed by W. Y. Wildman, traffic manager of the Illinois Coal Traffic Bureau, to the higher wages paid. The combined effects of the competition from lower priced coal, in the face of reduced coal consumption, and the struggle of mine operators to offset fixed charges and avoid evils of unemployment by keeping mines open, has been responsible, he stated, for selling considerable coal in Illinois below the cost of production. Almost without exception, all steam coal under two inches is so sold, but there has been little, if any, difference between the prices realized on commercial coal and those paid by railroads for mine run.

Speaking for the Indiana operators, who sell approximately 35 per cent of their coal to the railroads, C. G. Hall, manager, Walter Bledsoe & Company, advocated a "hands-off" policy of the government with respect to railway coal purchases. The railroads have greater power than the commercial buyers to exact the lowest prices from the coal operators, he said. They are not only able to create the keenest competition between the mines in one producing district, but, in the event that the operators in some particular district attempt to stand for an unduly high price, the railroads are in a position to haul their coal from other districts. The present policy of most of the railroads, whereby they fix fair and reasonable prices with regard to market conditions and the cost of production, is constructive, and, to overturn it or make drastic changes at this time would have a very disastrous effect on the employment situation, the welfare of communities and the financial condition of the country. The effect of competitive bidding for so large a tonnage, he contended, would increasingly aggravate the condition of social unrest which is now existing in so many mining communities, by giving some mines an advantage over others. Mr. Hall endorsed the present policy of allocating orders on the basis of commercial traffic as the most equitable way to distribute the orders.

B. & O. Conditions Reviewed

C. W. Galloway, vice-president of operation and maintenance, appeared before the hearing on March 23 and discussed at some length the demoralizing condition of the coal business, and the interest of the B. & O. as a coal-producing road and upheld the road's policy of paying higher prices for coal, under some circumstances, to protect and foster its traffic. Mr. Galloway said in part:

For years, there was no difficulty in dealing with the fuel coal question, because the coal industry was, generally speaking, in a stabilized and healthy condition, and contracts were generally made covering periods of a year or more as the circumstances warranted, at a price settled upon after bids were requested by taking the price asked by the majority of bidders. Thus, if 65 or 70 per cent or more of the bidders offered to supply coal for $1.25 per ton, that was made the price of the field and applied to all who were awarded any portion of the fuel requirements, even though their bid was under or over $1.25. This practice prevailed until the condition of the industry was disturbed by labor controversies.

The demoralization was intensified by the development of the reciprocal buying, and we finally discontinued contracts for purchases in the open market and recognized the reciprocal situation, but establishing 200,000 tons of commercial tonnage as the basis of allocating fuel purchases. Using 200,000 tons of commercial traffic as the basis of allocating purchases reduced the number of mines from which coal was taken, although spot purchases have been made at various times to aid a community that was in exceptional distress, to avoid foreclosure of some operation, or to relieve a situation where coal was loaded on the assumption that it would be disposed of, but was being held in cars indefinitely, while in other instances, purchases of spot coal were made because of favorable prices.

Continuing, Mr. Galloway referred to the practice of some roads, particularly the Southern lines, to set a price for fuel coal much higher than the prices at which the coal could be purchased, and very much higher, he said, than the B. & O. was paying, to enable their operators to cope with highly-competitive conditions that were so seriously threatening the coal industry and the railroad commercial tonnage, by selling their commercial coal at a price lower than it was sold to the railroad. He said:

While the B. & O. did not deal with it in this general manner, it dealt with it in exceptional cases for a short period where, some time in advance of the termination of an agreement, the price was extended for a few months for two reasons. In some cases, we did not get around to determining what our policy would be and continued the price from October on to December 31, 1930. This applied to some 12 operators, producing about 52 per cent of the fuel tonnage taken from the Fairmont field. In other cases, it was done to permit the operator to continue commercial shipments on commitments which would have proved ruinous if all his coal was sold at the minimum price this intensified competition had created, and to enable the operator, as far as possible, to hold and extend his commercial sales activities in low price competition.

This method of dealing with the question, Mr. Galloway stated, was on the merits of the particular cases involved, but was finally abandoned in 1930, since which the prices paid have varied with the offers made by the shippers. This he stated, was because the B. & O. saw the futility of its effort to protect the industry and took advantage of these varying prices for acceptable coal, at the same time not buying all of the cheapest coal, in view of its obligation to protect commercial interests in special cases.

He described the road's purchases from the Simpson Creek Coal Company, which the B. & O. had paid $1.40 for considerable coal in 1930, while buying the same coal from other companies for $1.25, as one of the cases where the price had been extended to enable the producer to get the large competitive tonnage which it had in prospect. It was immaterial to him what the producer did with the potential tonnage he had been able to contract for in competitive fields or at what price he sold it for so long as the B. & O. was assured of the additional tonnage over its lines. It would be suicide, he reasoned, for the B. & O. not to use any fair and honorable means to protect the coal on its road.

Chicago & North Western

Testimony disclosed that the C. & N. W. obtains 85 per cent of its coal from its own mines in Illinois and Iowa, and the remainder from dock companies on the Great Lakes, while 20 per cent of the coal for the Omaha line comes from the North Western's mines in Illinois, and 80 per cent from the docks. The North Western also buys fuel oil from refiners on its line in Wyoming. The road paid 10 cents more per ton in 1930 for dock coal purchased from the Hickman-Williams Company, coal agents of the Ford Motor Company, than to other dock companies, E. A. Clifford, general agent, stated because the Fairmont coal, supplied by the Hickman-Williams Company, was a better coal and, therefore, commanded a higher price than the Ohio coal furnished by the others. He also testified that the traffic department recommended both the tonnage and allocation of the dock coal orders and that he followed their recommendations.

More New York Central Facts

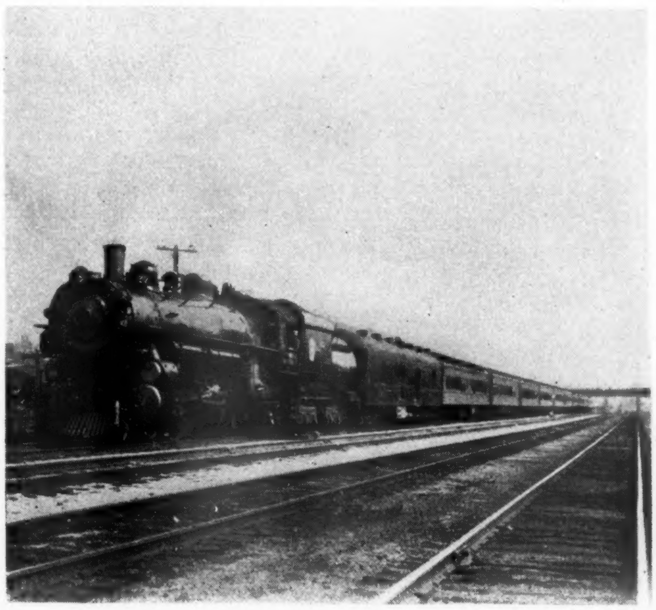
Testimony of W. C. Bower, vice-president of purchases of the New York Central, was heard last week to clarify testimony heard in New York on that road's fuel purchases. Questioned about the transaction in which Kanawha coal was sold to the New York Cen-

tral for $1.40 and the same coal offered to the Michigan Central for $1.25 per ton, Mr. Bower stated that the Kanawha Company desired to increase the tonnage of its mines and felt that with the resulting increase in mine production and its effect on costs, the additional coal could be sold for less, and it was, therefore, offered to the Michigan Central at the price of $1.25 per ton, which, with the 50 cents per ton freight, would make the delivered cost of the coal competitive with that obtained by the Michigan Central from the Ohio field for $1.75 per ton.

His attention being called to a large tonnage placed with concerns which had not filed bids, he explained that these companies shipped enough commercial traffic over the road during the previous year to entitle them to their pro-rata share of the road's purchases at the uniform price of $1.75 established for the district. It was for the same reason, he said, that the Fleming Coal Company and other brokers which had not filed bids had received orders. He also explained that the road had rejected offers of certain mines to supply coal at $1.25 per ton and had paid $1.35 to $1.40 per ton to brokers for that coal because the minimum commercial traffic of the mine operators in question was not sufficient to entitle them to coal orders under the allotment plan, whereas the traffic of brokers in question was sufficient to entitle them to orders, and that the brokers were authorized by the operators to sell their coal.

He declared it absurd to conclude from the fact that some coal was offered to the road at lower prices than were bid that the road could have effected the saving of $1,000,000 suggested in its coal bill, explaining that, in some cases, the coal offered at the lower prices was not acceptable, that in other cases the offers were made by irresponsible operators, and that, under no circumstances, could the large tonnage required by the road in the different fields be obtained at the lowest price bid. It was his opinion that the prices paid were generally in line with the prices paid for commercial coal, but he said that even if the commercial coal were selling below production cost, the New York Central would continue to pay a price comparable with the cost of producing the coal.

* * *



On the Union Pacific at Omaha, Neb.

I.C.C. "Co-ordinated" Into Reluctant Relief

WASHINGTON, D. C.

RELUCTANTLY assenting to a policy adopted by the Reconstruction Finance Corporation following the series of conferences in which President Hoover participated on March 17 and 18, the Interstate Commerce Commission, Division 4, on March 23 approved an additional loan of $12,800,000 to be made by the corporation to the Missouri Pacific, including one-half of the $11,700,000 of its bank loans due April 1, on condition that J. P. Morgan & Co., Kuhn, Loeb & Co., and the Guaranty Trust Company of New York agree to extend the other half to a date not earlier than October 1. The commission did not, however, refrain from expressing its opinion.

Its report, made public on March 25, said that it was taking this action "with some reluctance", and that "we are not convinced that the Reconstruction Finance Corporation should be expected to take up bank loans of this character. We yield our own views to those of that body which, as we construe the law, is charged by Congress with the responsibility for determining that question." It then stated that the corporation had filed with it a certified copy of a resolution of its board of directors, dated March 18, stating that "in the opinion of this board all existing uncertainty as to the disposition of the April 1st maturities of the Missouri Pacific Railroad Company is detrimental to the general credit situation of the railroads," and authorizing a loan of $5,850,000 to the railroad, subject to the commission's approval, on condition that the holders of the balance of the bank loans agree to the extension. The resolution also included the condition that one-half the collateral held by the banks and such additional security as might be recommended by the commission or hereafter seem advisable to the board be delivered to the corporation.

The commission's approval was dated on the same day that the Missouri Pacific filed with it an amendment to its application reducing the amount of the loan desired for payment of bank loans from $11,700,000 to $5,850,000 and saying that it was understood it would arrange with the banks for a like amount.

Differences of opinion within the government's organizations as to the policy to be pursued in handling bank loans was one of the subjects discussed in the conferences which the President held on March 17 and 18 with the officers and directors of the corporation, Commissioner B. H. Meyer, and the advisory committee of the Association of Railway Executives, who had been seeking some way of preventing the government differences from prolonging the uncertainty as to how the railroad maturities were to be met. The President had later announced that a "co-ordination of programs and policies" had been arrived at by the government and the railway agencies. That there have been differences within the commission's organization is indicated by the fact that its Finance Bureau had suggested in the first place in several instances that the banks be asked to extend half the loans and that Commissioner Eastman, in a partially concurring opinion, said that "no good reason has been shown for approving a government loan to enable the applicant to make a 50 per cent payment on the bank loans maturing April 1." The commission has heretofore approved several loans to meet bank loans, especially where the amounts were small or where they were due almost immediately, as in the case of the

Nickel Plate loan of $6,000,000 from the Guaranty Trust Company, but it had also deferred consideration of several other applications of this kind, suggesting a 50-50 basis or that the banks be asked to extend part of their loans.

In several instances the banks had declined to extend the loans and in the report of the New York Central loan of $4,399,000 also approved March 23 the commission had said that the bankers had been represented as being averse to making loans the proceeds of which are to be used solely for capital expenditures, and that according to applicant's statement, "the present policy of the banks is to use their cash resources for the relief of urgent and immediate requirements of industry and business." It was also stated that the New York Central owed $64,500,000 on 5 per cent demand notes to the New York Central Securities Corporation, J. P. Morgan & Co., and eight banks but that "it is understood that, if the loan be granted, the present status of the banks loans situation will be maintained until the applicant is able to finance by other means."

It is understood that the principal concern of the railroads has been as to some assurance that they would be taken care of and the policy indicated by the President and the corporation is that they will be, although the government is asking 6 per cent interest and plenty of collateral, while the bank loans were generally drawing 5 or 5½ per cent interest.

In its report on the Missouri Pacific loan, Division 4, Commissioners Meyer, Eastman, Brainerd, and Mahaffie took a slap at the bankers by saying:

"The bankers who hold the loans are bankers for the carrier. As such, they have profited largely in handling its financing in the past. It is often represented to us that the relation of a banker to a railroad is very valuable to it because of the banking assistance so rendered available in time of stress; that a railroad can afford to compensate its bankers well in connection with its regular financing in order to have such support available when it is needed. We have heretofore thought that theory to have more merit than this transaction appears to indicate."

Commissioner Eastman said he would have no difficulty in joining in the approval if there was any evidence that the loan was needed in the public interest. "But no one has made or attempted to make such a showing. Applicant told us that the banks would not extend the loans. The Reconstruction Finance Corporation now tells us that they will extend 50 per cent. The theory is, apparently, that a government loan to pay the other 50 per cent is necessary in order to prevent a Missouri Pacific receivership. No such necessity exists. Morgan & Company, Kuhn, Loeb & Company, and the Guaranty Trust Company would not, so long as the interest on these bank loans is paid, force a receivership by refusing an extension. The repercussions would be much too dangerous in other quarters where the private interests of these financial institutions are involved. I realize that the majority are no more persuaded than I am that there is any need for using government funds to 'bail out' these banks. They place the responsibility on the Reconstruction Finance Corporation. It seems to me, however, that we have a responsibility which we cannot thus escape."

Under the law creating the corporation it cannot make a loan not approved by the commission, and according to its circular this requirement has been extended to the form of obligation and the terms and security therefore, but in this instance the corporation to some extent apparently forced the hands of the commission by "authorizing" the loan of $5,850,000 before the commission had acted.

The Missouri Pacific had originally applied on January 29 for a loan of $23,250,000 to meet its requirements for the year. By supplemental applications this was increased to $24,650,000. In February the commission approved and the corporation made two loans of $1,500,000 and $2,800,000 without prejudice to action later on the remainder. The additional loan now approved is intended to meet the company's requirements to May 1.

The bankers' side of the story has not been told, but it is understood they have been trying to keep short-term loans from being put on a long-term basis, and they are also still carrying loans to many roads. Nor has there been any indication that these particular banks have received any loans from the government.

Another case in which the commission had deferred consideration of a loan to pay bank loans was that of the Erie, which had $5,550,000 of 90-day loans from large banks in New York, including the Guaranty Trust Company, and in that case the commission had suggested that they be asked to carry half the amounts. It has since been learned that $2,550,000 of this amount came due on February 29 and was renewed for another 90 days, while $2,050,000 came due on March 29, and $950,000 was renewed in January until April 12.

Also the Denver & Rio Grande Western, which originally applied for a loan of $4,000,000, withdrew its request as to $1,500,000 of the amount representing a loan from the Chase National Bank due April 1, and a loan of $2,500,000 was authorized by the commission on March 21. It is reported that the bank loan has been renewed to October 1.

The Finance Corporation announced on March 28 that it had authorized the loan of $12,800,000 to the Missouri Pacific but that $5,850,000 of it was loaned only for six months, while the balance was loaned for three years.

None of the commissioners dissented from the finding in the report "that the Reconstruction Finance Corporation will be adequately secured" a point on which, it is understood, the advice of the commission is more appreciated by the Finance Corporation than its views on the question of policy involved in this case.

President Hoover announced on March 25 that he had received a report from the Reconstruction Finance Corporation showing that it had authorized loans amounting to $234,981,714, including loans to 13 railroads amounting to $46,975,557, an average of $3,613,504 per institution. Loans had been authorized to 587 banks and trust companies to the amount of $126,895,073, an average of $216,162, and he emphasized that these were largely to banks in small communities. The list also included loans to 18 building and loan associations, 13 insurance companies, 2 joint stock land banks, 3 mortgage loan companies and 1 livestock credit association, in addition to $50,000,000 allotted to the Secretary of Agriculture for agricultural loans. Up to that time the Interstate Commerce Commission had approved 21 loans to 18 railways amounting to about $73,000,000, on 49 applications for a total of about $356,000,000. In some instances the figures have been changed since the original announcement by supplemental or revised applications.

In addition to those previously announced, the Finance Corporation has approved, without making announcement at the time loans to railroads as follows: Central of Georgia, $1,418,700; Chicago & Northwestern, $1,910,500; Erie, $4,458,000; Minneapolis, St. Paul

(Continued on page 569)

Agnew T. Dice, Reading President, Dies

Head of important coal road for sixteen years succumbs to heart attack on March 25

AGNEW T. DICE, president of the Reading Company since its formation in 1924, of its predecessor since 1918, and of the Philadelphia & Reading Railway Company from 1916 until its absorption by the Reading Company in 1924, died suddenly on the evening of March 25, at Philadelphia, Pa. The cause of Mr. Dice's death was a heart attack, with which he was stricken while returning, on a street car, from a theater performance to the hotel where he had made his Philadelphia home, and to which he succumbed before he could be removed to the Hahnemann hospital. A meeting of the board of directors of the Reading Company, to consider the election of a successor, has been tentatively set for Thursday, April 28.

Agnew Thomson Dice

Mr. Dice's term as president—a period of sixteen years and ten days—was one of constant physical improvement, in the best senses of the word, of the properties under his control: extension of the mileage owned, operated or controlled; betterment of operating or terminal facilities at the more important points served; electrification, and extension of the Reading's transport operations to highways paralleling its rail lines were among the more outstanding tangible accomplishments of his administration. Major improvement projects carried to completion included, among many others, the provision of a new rail-and-ferry terminal at Camden, N. J.; new passenger stations at Reading, Pa., at North Broad street, Philadelphia, and at other points; a line revision project involving a change in the channel of the Susquehanna river at Port Clinton, Pa.; additions to freight-handling facilities at various points, including a new terminal warehouse at Philadelphia, and numerous grade crossing eliminations.

During the last four years of Mr. Dice's regime, new capital investment was largely in the field of electrification. Late in 1927 his company adopted a program for the conversion to electric operation of its suburban lines in the vicinity of Philadelphia. At the same time, plans were made for the purchase of electric rolling stock; provision of repair facilities therefor; station improvements; grade separation, and signal changes. This program, with the exception of the Chestnut Hill branch electrification, has now been carried to completion, and electric trains have been in operation for some months.

The Reading has not, however, confined its operations solely to its own lines. Faced during nearly the whole of Mr. Dice's administration by increasing competition from motor buses and trucks, it has taken to the highways, through the medium of the Reading Transportation Company, in a successful effort to hold or regain both passenger and freight traffic. As regards passenger traffic, this highway subsidiary, which began operations in April, 1928, now operates 81 motor coaches over 35 routes. In some cases, service is supplementary to train schedules between large cities; in others, buses have entirely replaced unremunerative branch line trains, with a considerable saving in operating expenses to the parent company. Highway freight service was not inaugurated until April, 1930, but subsequent plans were drawn up late in 1931 for wide extensions of this type of operation. With the proposed changes in effect, the transportation company routes will not only replace certain Reading local freight trains, but will also parallel many of its main lines, offering complete door-to-door transportation service.

During the present business depression, especially, Mr. Dice has come into prominence as a result of his efforts to maintain employment and business generally. He was one of a number of railway executives called to Washington in the fall of 1929 to consult with President Hoover regarding measures for the revival of industry. Ever since that time, despite unfavorable traffic and revenue conditions, the Reading has gone steadily forward with its program of electrification and improvement, thereby keeping hundreds of men at work, directly or indirectly. Only two months ago it purchased 30 multiple unit cars, the largest order for passenger equipment to be placed in more than a year; and as recently as November 30, 1931, it authorized an expenditure of $4,000,000 for electrification additional to the original program, new equipment and other constructive work. Typical of Mr. Dice's attitude was his statement at that time: "The management of the Reading Company believes this to be the opportune time to place large contracts as a stimulus to industry and to provide employment when so urgently needed."

Agnew Thomson Dice was born at Scotland, Franklin county, Pa., on November 2, 1862, and was educated at Chambersburg Academy. He entered railway service with the Pennsylvania in 1881, as a flagman with the engineering corps, being promoted, in the following year, to rodman and assistant engineer. In 1887, at Altoona, Pa., he was assigned to special

work on signals. A year later he was appointed assistant supervisor, and, in 1890, supervisor. He gave up the latter position—his last with the Pennsylvania—in January, 1892, to become superintendent of signals on the New York Central & Hudson River (now part of the New York Central), which road he subsequently served, from January, 1893, to 1894, as assistant superintendent of its Hudson division.

It was in 1894, in the capacity of superintendent of the Atlantic City Railroad (then as now part of the Reading system), that Mr. Dice first entered the employ of the company of which he was later to be elected president and with which he has since been continuously connected. After three years as superintendent of the A. C., at Camden, N. J., he was transferred to the Philadelphia & Reading proper, serving during January and February, 1897, as assistant superintendent of its Reading division in charge of the Philadelphia freight terminals, and from the latter date to 1903 as superintendent, Shamokin division. In 1903 he was advanced to general superintendent of the P. & R.; on January 1, 1910, to general manager, and on January 1, 1913, to vice-president and general manager, which position he held until 1916. On March 15 of that year he was elected president of the Philadelphia & Reading, succeeding Theodore Voorhees, and two years later was elected also to the same position with the Reading Company, owner of the Philadelphia & Reading Railway Company. When the present Reading Company, formed in 1923 by the merger of the old Philadelphia & Reading Railway, the former Reading Company, and a number of subsidiary railroads, took over actual operation of the various properties involved, on January 1, 1924, Mr. Dice continued as president of the new combined organization, maintaining headquarters at Philadelphia and holding office until his recent death.

House Committee Considers Railroad Bills

WASHINGTON, D. C.

HEARINGS before the House Committee on interstate and foreign commerce on the so-called "holding company" bill were concluded on March 24 and it was announced that the committee would take up the consideration in executive session of this bill and the bills on which hearings were held in January and February to revise Section 15a of the interstate commerce act.

The final testimony was given by Commissioner Eastman, chairman of the legislative committee of the Interstate Commerce Commission, who has been its principal advocate and who has contended that it is necessary to bring the process of railroad unification under effective public supervision. After several members of the committee had expressed concern as to whether it was necessary to give the commission such far-reaching authority as that proposed by the bill to decide who may own railroad stock under conditions which the commission may consider an interference with the carrying out of its consolidation plan, Commissioner Eastman said that it might not be necessary to give the commission power to require the divestment of stock, although he would like to see that included in the bill. If that were eliminated, he said, power to require that stock be placed in the hands of a trustee, or that it be deprived of voting power, might serve the purpose. He said he did not think the commission would exercise such power very drastically or in such a way as to cause a loss to the holder unless it appears that stock prices do not get back to what might be called normal, and he pointed out that in two cases where it has ordered railroads to divest themselves of stock under the Clayton law it has permitted the stock to be trusteed.

Asked by Representative Wyant what the holding companies have done up to now to retard consolidations, Mr. Eastman said it is purely speculative as to what might have been done if they had not operated. They have been working toward certain combinations of railroads, he said, and also against certain other combinations. If the commission approves those they are working toward they will have been promoting consolidations but if the commission does not they have been obstructing. If the four-system plan is approved they will facilitate the transfer of stock but if the commission adheres to its present plan or approves a plan differing from that proposed the present holdings might interfere with its carrying out. He said his concern was principally not that they have prevented consolidations but that they bring about combinations without public supervision.

Asked if it would not be better to defer action until the commission decides on that plan, Mr. Eastman said he did not see why passage of the bill would interfere if the commission approves the plan but that if it does not it would leave it in a better position to deal with the situation. He said he would not want to agree that the purpose of the bill was to compel divestiture except in certain circumstances and that if the four-system plan should be approved there would not be much occasion to exercise that power. It might be decided, he said, that the Missouri Pacific should not be controlled by the Alleghany Corporation, because the systems set up in the plan ought to be independent.

Representative Beck asked how the holding by Pennsylvania interests of 22 per cent of the stock of a noncompetitive road (the New Haven) could affect the commission's plan. Mr. Eastman said the plan provides for separate independent systems in New England and he could not believe the Pennsylvania had made so large an investment in New England without expecting to have some influence. He also referred to the theory advanced by Bentley W. Warren, counsel for the New England governors' committee, that acquisition of even a road connecting end-to-end might result in restraint of trade by affecting its freedom of dealing with other lines, but he said that if it could be shown that the Pennsylvania holdings were not influencing the situation the commission would not have to do anything. When Mr. Beck asked if the commission does not have sufficient control over the situation under its power to attach conditions to authorizations asked by the railroads, he replied that such conditions must be germane to the authority sought. Mr. Beck said the power proposed to be lodged in the commission would be a tremendous one, to be exercised wisely or unwisely, and that he assumed "we are all anxious to avoid an ex post facto law if it is not necessary." He also said that "influence is one thing and control is another."

A statement by Dr. W. M. W. Splawn, special counsel for the committee, containing an argument in support of the constitutionality of the bill was put into the record.

Security Holders Object

Fred N. Oliver, general counsel for the National Association of Owners of Railroad and Public Utilities

Securities, filed a statement expressing disapproval of the bill.

"We question the expediency of the measure and apprehend it would have an injurious effect upon the values of railway securities generally," he said. "It would restrict the number of people in position to buy railroad securities. The bill is referred to as one regulating the acquisition of control. It might with equal propriety be referred to as one restricting the right of present owners to sell their securities. Restriction of the right to acquire is restriction of the right to sell. We question seriously the wisdom of taking out of the market for railway securities the resources of men in strong financial position to do things and who have the ambition to carry out constructive plans." Mr. Oliver also said in part:

The power given to the commission to require present companies to divest themselves of their holdings we regard as alarming. The bill would authorize the Interstate Commerce Commission to require holding companies now in existence and owning control of important properties to sell their security holdings within a limited period at a price to represent their "fair normal market value" and pending such sale the commission is to have the power, through some trusteeship, to divest the owner of the shares of the voting power on his holdings. No weight apparently is to be given to the price paid by the holding companies for their holdings.

This whole divestment idea seems to be a novel one. The plan does not contemplate that the government shall be the purchaser of the stock. There is to be no judicial determination of the value of the stock. Seemingly there is to be no appeal from the finding of the commission. Apparently the idea is that the power given to the commission to require the divestment is to be used as a means to compel the holding company to fall in with whatever consolidation plan the commission may work out.

A proposition that the federal government should require an owner of securities, who has purchased them in good faith, to dispose of those securities at a price which would represent a large loss seems shocking. Assuming that the securities have been bought under existing law, it would appear to be quite as shocking to require the owners of railway securities to sacrifice their holdings as it would be to require any holder of property to dispose of it at a loss, whether he desired to do so or not. It is not easy to see how such a confiscation of property rights could have legal sanction.

We feel too that the concentrated ownerships in railway companies are essential as steps toward progress with consolidations. If and when consolidations are gone ahead with, progress will be due to the fact that certain individuals having substantial interests, and constructive plans, desire to proceed with consolidations. Only such persons can initiate or formulate consolidation plans. Concentration of ownerships, therefore, is essential in order that any consolidation plan can succeed. Nor do we feel there is any reason to apprehend that the holding company ownerships will defeat any consolidation plan finally decided upon by the commission, and which has the approval of public sentiment.

There is now being discussed what is known as the four-party plan. If the commission approves their plan, there is every reason to expect that when all questions are finally thrashed out, the companies involved in the four-party plan will in a whole-hearted way do all they can to carry out the plan. If this plan goes through, the holding company situation now existing will be cleared up.

It is the view of the commission and its advisers that the bill now before your committee raises a very serious question as to the power of Congress. By this bill, as we understand it, the Congress is asked to go farther than it has ever gone before on a serious constitutional question. Obviously the power to enact this bill can rest only on the commerce clause of the Constitution. Its legitimate purpose can only be to protect interstate commerce against interference. The bill proceeds on the theory, as we understand it, that the mere power to affect interstate commerce, which ownership gives, confers upon the Congress the right to say who shall and who shall not own the agency. The bill can not be justified as preventing interference with interstate commerce, or as preventing restraint of competition. It does not cover such a case as was involved in the *Northern Securities case* where competing railroads were brought under common control and the effect of the common control necessarily was to interfere with competition. The bill now before you proceeds on the theory that it is immaterial whether the joint control does or does not affect competition.

If the Congress has the power to enact this bill, there would seem to be scarcely any limit as to the right of Congress to interfere with and control developments of all sorts throughout the states. We do not believe that such was the intent. We believe that the intent of the Constitution was to limit the right of Congress to regulate the functioning of the agency.

I.C.C. "Co-ordinated" Into Reluctant Relief

(Continued from page 566)

& Sault Ste. Marie, $1,318,082; Mobile & Ohio, $785,-000; New York, Chicago & St. Louis, $9,300,000; St. Louis-San Francisco, $2,825,175.

That the "co-ordination" had not extended to the Senate was indicated on March 28 when Senator Borah read from newspaper reports on the Missouri Pacific loan and said he was informed that "every form of pressure within reason and decency, perhaps decency, was used to bring about this decision upon the part of the Interstate Commerce Commission," and that he thought "an effort to control the commission in this way is worthy of consideration" and "worthy of the attention of those who supposed the Reconstruction Finance Corporation was created for a specific purpose and not for the purpose of enabling the banks that desire the use of money to have the advantage of the public Treasury of the United States." He did not say what other specific purpose he had in mind, however.

Senator Dill said he had been informed that the corporation has been loaning money to pay 4½ per cent interest on railroad bonds that are selling for 21 "so that the interest paid is more than 20 per cent of the present price of the bonds." Senator Borah said he was not familiar with that.

When Senator Couzens announced that he proposed to discuss the subject the next day, Senator Johnson suggested that he also discuss the question of "a government of, for, and by international bankers." Senator Couzens said that what he had in mind was not so much the international bankers "as it is the Van Sweringens and the treasurer of the Republican National Committee (J. R. Nutt) who have been more effective in this matter than have the international bankers." Senator King said he hoped the Senator from Michigan, whose "knowledge of railroad questions is great," he said, would also discuss the four-system plan.

Senator Couzens made his speech on Wednesday without adding much to the public information on the subject. He said that the Senate had contemplated in passing the Reconstruction Finance Corporation act that loans were to be made to prevent defaults on outstanding securities and that so far as he could learn loans were not contemplated to meet operating expenses but he conceded that loans were to be made for "temporary financing." He read a letter from Commissioner Eastman saying that no standard was set up in the law by which the commission was to be governed in granting or withholding approval but that in the absence of any rule he had felt that the commission should apply that specified for the corporation and should satisfy itself that a loan would be in the public interest. Senator Couzens expressed the opinion that if loans are continued in the manner they have been made in the past many of the properties will revert to the government or the government will lose its investment.

Bus Hearings Near End

WASHINGTON, D. C.

HEARINGS before the Senate committee on interstate commerce on the Couzens bill to provide for a system of federal regulation of interstate bus transportation and of registration by a permit system for truck transportation were expected to be concluded on Thursday of this week. Senator Couzens has been trying for some time to shorten the testimony so that the bill may be reported out of committee at this session but he has also indicated that he is not inclined to make many important changes in the bill as drafted and very few other members of the committee have attended the hearings. He expressed considerable impatience at the amount of detail that representatives of the bus operators sought to put in the record, saying that he thought their story had been told by witnesses representing the manufacturers, and asking why it was necessary to spend so much time on the facts if an agreement could be reached on principle. However, although the bus interests have been seeking legislation to provide for regulation for the past seven years, they indicated strong opposition to many features of the Couzens bill and several suggestions were made for reducing the jurisdiction proposed for the Interstate Commerce Commission.

John R. Bingaman, president of the Bingaman Motor Express Company, of Pennsylvania, who testified on March 23, urged regulation of interstate truck rates and said that certificates should be required for truck operation. He described the present situation as "demoralized" and said that the trucks are not doing the "chiseling" in regard to rates but that the "large manufacturers are chiseling the motor trucks."

W. H. Chandler, manager of the traffic bureau of the Merchant's Association of New York, who testified on March 24 and 25, criticized the Flynn report as having been based largely on railroad testimony and he opposed truck regulation, but he advocated legislation to provide for joint rail and highway rates, subject to the jurisdiction of the commission, and that rail carriers be specifically authorized to participate in highway transportation through subsidiary companies with provision so that any losses could not be charged against rail operations. George C. Murray, secretary of the National Builders' Supply Association, urged the passage of regulatory legislation for trucks, saying that unregulated trucking is one of the major causes for the chaotic condition in the construction industry. H. S. Shertz, representing the National Team and Motor Truck Owner's Association and the Pennsylvania Warehouse Association, opposed regulation, saying it could not be made effective.

With 45,000 communities in the United States without rail service and one-third of the total population dependent upon public motor carriers for their highway transportation, regulation of interstate bus lines is essential to the development of an orderly and dependable service, according to Arthur M. Hill, of Charleston, W. Va., president of the National Association of Motor Bus Operators, who testified on March 28. Mr. Hill, who is also president of the Atlantic Greyhound Lines, Inc., also said, however, that bus transportation will terminate if Congress attempts indirectly to tax buses in the form of restrictions that would mean prohibitive operating costs.

During the year 1930, he said, there were a few more than 46,000 buses engaged in the common carriage of persons. Of the total, 32,500 were engaged in intercity service and of these, at least 3,000 were in the touring or average passenger car class. These 32,500 buses carried approximately 504,000,000 passengers and collected some $290,000,000 in fares. Referring to statistics showing that from 1921 to 1929 the number of rail passengers decreased from 1,061,131,000 to 787,032,000 —a loss of 274,098,000 passengers, he continued: "According to most railroad economists, only between 10 and 25 per cent of this loss can be attributed to the motor bus, the balance of the loss being due to privately-owned passenger cars. Assuming that the loss to the motor bus did amount to the maximum generally estimated, 25 per cent, it would seem that only 68,524,000 of the total of 504,000,000 passengers carried between cities by motor bus could be considered as ex-rail passengers; the remaining 435,476,000 represents traffic developed purely by bus facilities from people who either never traveled before or who, prior to the inauguration of bus service, used other means of highway transport. The bus has created most of the traffic it is carrying."

Voicing opposition to certain features of the proposed regulatory legislation, such as the arbitrary limiting of operators' hours of service, the requirement that two men be placed on interstate buses carrying more than 20 passengers, and unnecessarily burdensome insurance requirements, Mr. Hill added:

"If these provisions are included the cost of motor bus operation will be increased by at least three and one-half cents per bus mile and the effect will be the same as though a direct tax in that amount was levied by the federal government. This, of course, might give great comfort to those people who are advocating an increase in bus costs through the imposition of operating taxes but so far as bus operation is concerned, it might well mean the termination of all interstate service."

S. A. Markel, chairman of the legislative committee of the bus association, said that trucks should not be included in the same bill with bus regulation and suggested that opposition of truck interests might help to prevent passage of the bill, even though it provides for little more than registration of trucks. Senator Couzens retorted that the Senate would not be satisfied unless the committee does something about trucks.

Edmund W. Wakelee, of Newark, N. J., vice-president of the Public Service Co-ordinated Transport, declared that legislation to eliminate the unhealthy conditions in interstate bus operations should not be delayed by any effort to include regulatory measures for trucks. Citing the fact that the problem has been before Congress for seven years, the witness pointed out that while the Senate and the House have both passed bills that would have been helpful, inability of the two branches of Congress to agree upon a single bill has denied the public and the bus industry the desired relief. Mr. Wakelee said that regulation can best be accomplished through a plan for control of interstate lines by joint boards of the commissions in the states involved, with right of appeal to the Interstate Commerce Commission. With reference to the interest of the railroads in bus regulation, he said: "We bus men have no objection to the railroads having the fundamental legal right to operate buses, but permits should be granted and railroad operation carried on under exactly the same conditions and subject to the same regulation, restrictions and laws as applied to other bus operators."

Mr. Wakelee said that the hours of service provision, which he termed "impracticable and uneconomic," would work a particular hardship on local operations in interstate service, and urged the committee to leave regulations with respect to the maximum hours of service

to the regulating bodies to "prescribe what is reasonable in each particular situation." With reference to the proposed requirement that two men be placed on all interstate buses having a capacity of more than 20 passengers, Mr. Wakelee declared that such a provision would cost his company alone $1,100,000 a year in additional expense and that "interstate traffic would be destroyed" by a restriction that would not add to safety.

Ivan Bowen, counsel for the Greyhound Lines, made a suggestion that Congress might pass a law divesting trucks of their interstate character in order to provide for regulation by the states through which they operate.

F. E. Paulson, traffic manager of the Lehigh Portland Cement Company, asked that the bill be amplified to provide for the publication and filing of truck rates. He said that each shipper knows what his competitor is paying in railroad rates but that with the advent of the truck the stabiliation of transportation costs began to disappear and that the truck has played an important part in pulling down cement prices. He had written to a considerable number of trucking companies for rates and cited them to show that "no two are alike" between the same points, and said that his company had refused to go into the trucking business itself except at two points where it was necessary. Milton P. Bauman, president of the New Jersey Traffic League, advocated truck legislation and said that the provisions of the bill are not adequate.

John T. Corbett, legislative representative of the Wisconsin legislative board of the Brotherhood of Locomotive Engineers, asked the committee to consider the "human side" of the question, and pointed to the large reduction in the number of railway employees and in their earning power. He said that the railroads have a very large investment in the training of their employees and particularly objected to any provision in the bill that would prevent railroads from finding places for displaced railroad employees in bus or truck operations. He cited statistics from the experience in Wisconsin to show that buses and trucks are not paying their share of the road costs, and that the total receipts of the state and local communities in Wisconsin from motor vehicles do not pay for the upkeep of the roads, while he said that a Ford car pays more gasoline tax per ton-mile than a bus. The leaders of his organization, he said, endorse all of the testimony given by Dr. Duncan of the Association of Railway Executives and most of that given by Mr. Aishon, and in reply to statements that efforts toward more stringent state regulation had been instigated by the railroads he said that in Wisconsin the bill was brought into the legislature by the bus interests and that the railway employees asked that trucks be included.

Mr. Corbett made the point that "merchandise men" and members of commercial clubs have protected themselves against "peddler competition" but at the same time most of them are opposed to any protection for railroads and their employees against the "peddlers of transportation." In discussing the question as to whether the adequacy of existing transportation service by railroad should be considered in passing upon applications for certificates of convenience he said that "Congress should have the intestinal fortitude to say that if any favors are to be shown they should be shown to the railroads and their employees that have been furnishing an adequate service."

Asked by Senator Couzens whether he favored the proposed limitation of the hours of service of bus and truck operators to eight hours a day, Mr. Corbett said the basis of a day's work and pay should be six hours, in order to take up the slack in employment, but he later said that provision might be made for a period of release on interrupted runs so that the total spread of service in a day might be as much as 12 hours. When Senator Kean asked how he expected to keep up the wage scale of railroad employees when truck drivers are getting only $4 a day, he replied that the unregulated competition among the trucks is reflected in the wages paid and that there are "bootleggers of transportation" as well as other kinds.

Taxpayers and Security Owners Represented

C. L. Bardo, president of the Taxpayers' League of New Jersey, president of the New York Shipbuilding Company, and a former officer of the New York, New Haven & Hartford, urged the importance of regulation of truck transportation from all three standpoints. He said the New Jersey taxpayers had been making a study of the tax situation and had found that it was impossible to increase the fees paid by intrastate truckers adequately unless there is some regulation that will enable them to reach the interstate trucks. As a shipper he had found that his freight rates had been increased partly because of the inroads on railroad traffic caused by trucks, while a shipbuilding company is absolutely dependent upon railroad service and cannot depend on trucks. The user of a highway should pay a reasonable amount toward the cost of the highway, he said, and where a railroad is able to perform adequate service it should be given a reasonable chance, because duplication of transportation service is adding to taxes and railroad costs and to the rates paid by shippers.

J. A. Farquharson, national legislative representative of the Brotherhood of Railroad Trainmen, said that the 21 railroad labor organizations had asked their counsel, Donald R. Richberg, to make a statement for them but that he was engaged in Arizona, and he asked that he be given an opportunity to appear later. Senator Couzens replied with some asperity that they had known that the hearings had been going on for two months and that they were going to be closed on Thursday. He said that Mr. Richberg's statement could be filed or that some one would be given time to appear on Thursday but that the hearings could not be continued. He said that all amendments to the bill proposed by the various witnesses would be turned over to the Senate drafting bureau which would make submissions to the committee.

Fred N. Oliver, general counsel of the National Association of Owners of Railroad and Public Utilities Securities, filed a statement including a legal argument as to the power to regulate contract carriers and urging that existing transportation service be considered in passing upon certificates.

"The security owners do not advocate legislation designed to drive motor carriers from the highways," Mr. Oliver said. "They feel as a fair sporting proposition that competitors of railroads should be required to operate under similar restrictions that now apply to the railroads. To the extent that motor vehicles can move traffic most economically after paying its proper costs then, of course, no investor can complain. All invested capital must stand the risk of change in progress. But to the extent that traffic of railroads is on an unfair basis in competition, there is injected into the railroad business a speculative risk and hazard not present before. All that the security owner is concerned in is to see that the advantages as between the railroads and motor vehicles are equalized and allow economic laws to do the rest. In the opinion of the investors the railroads are still superior in the field of transportation and will continue to be."

Push-Button Calling Key for Train-Dispatching System

A PUSH-BUTTON type of calling key, recently developed by the Bell Telephone Laboratories, Inc., for use in the Western Electric telephone train-dispatching system, is said to possess two important advantages over the rotary type of key heretofore standard on this equipment. One advantage is that greater accuracy of impulse timing is obtained, and the other is that space requirements have been materially reduced.

The older type of calling unit consists of a set of rotary keys, one key for each station on the line. To call any particular station the dispatcher gives the corresponding key a quarter turn to the right and allows the key to return to its original position under its own spring action. In doing so it sends over the line three groups of pulses, alternately positive and negative. These groups of pulses are received by a selector at all the stations, but the selector at only one station will respond in such a manner that the call bell at that station will ring. Thus, in the ordinary installation, any one of a maximum of 78 stations may be called by the dispatcher on a single line without ringing any of the other stations.

This system had two limitations. In the first place, the cam of the key, which sends out the pulses, is operated by a spring and controlled by a friction-type fly-ball governor, and the accuracy of timing secured in this manner is limited. In the second place, the space required for the keys is large, a 60-key cabinet, the largest size ordinarily furnished, being more than 33 in. long.

These two objectionable features of the old system have been eliminated in the new calling unit. A synchronous motor, instead of a spring, is used to time the pulses, and, because of the uniform speed obtained in this manner, all pulses are of the same duration. Furthermore, a distinctly different calling system is employed. Instead of using a separate key for each station on the line, the new unit has two sets of push-button keys on which any of the 78 possible codes corresponding to the 78 possible stations may be set up. Instead of manipulating a key corresponding to the desired station, as was done with the old unit, the dispatcher presses the two keys designated in the first two columns opposite the desired station on the designation card. Thus, the dispatcher can accomplish, with 28 small keys on this new and smaller control unit, exactly the same results that could formerly be accomplished only with a much larger unit comprising 78 keys of the old type.

The new calling unit, although of approximately the same height and depth as the older type, is only 10¼ in. wide. This is less than one-third as wide as the 60-key unit of the older type and 30 per cent narrower than the 24-key cabinet, which was the smallest size supplied to railroads.

Operation

With the system of pulsing used, three groups of pulses are sent, but the sum of the three groups is always seventeen. Because of this fact, when the number of pulses in any two groups of a complete signal is known, the number in the third group is fixed, since it is seventeen minus the sum of the other two. Therefore, it is necessary to set up only two numbers to determine the three groups of pulses, and this is the reason why only two sets of keys are provided for setting up the code wanted. Each set consists of two rows of buttons, numbered 0 to 13, inclusive; the upper set, on which the first number of the code is recorded, is red, and the middle set, used for recording the last number of the code, is white. The lettered buttons in the single row at the bottom are employed for certain auxiliary functions such as repeating a call, stopping the progress of a call, or selecting any of four possible stations at the office called. The number of pulses in any of the three groups of a code is never less than two, so that buttons 0 to 1 are not used for regular codes but are reserved for special services. Another feature made possible by the new equipment, which would have required extra keys with the old, is the calling of stations in groups. Special services of this sort required additional keys with the old system.

Where it is desirable to combine several dispatching lines and treat them as a group, a unit is employed which is like the other except that each of the two groups of keys has three rows, with keys numbered up to 20. When this arrangement is used, the total number of pulses per code is 27 instead of 17, and the number of possible codes is 341 instead of 78. With this arrangement, each station on the group of lines is assigned a different code, and any station on any of the lines may be called from a single location. All of the stations may also be called at the same time or groups of them may be called in a manner similar to that already described.

Besides securing a uniform length of pulse, made possible by employing the synchronous motor, the new unit has several other advantages. Not least of these is that the unit is entirely self-contained. All the equipment required is mounted in the single housing. Also, the keys lock in the operated position so that the last number called is always indicated by two depressed keys, and, upon setting up a new number, those last depressed are released. Another advantage of the new arrangement is that the same sending equipment is used regardless of the number of stations on the line. When new stations are added only the addition of code numbers to the designation card is required.

The New Calling Unit, Which Employs a Distinctly Different Calling System

Communications and Books . . .

A Warning, and Some Advice

CAMDEN, N. J.

MR. EDITOR, RAILWAY AGE. DEAR SIR

While all the big fuss is gowing on about the R. R. and the trucks i want a word to the R.R. Big Boys and knowing as i do the class of people that read the age thats why i am asking you to print this in your magazine. now you may think i am nocking the R.R. but i dont mean it that way if i did i would give this to the newspaper i am for the R.R. first last and all but its an old old saying the smartest men make a mistake some times and Vice e Vircie a fool makes a senceable remarke some times, so now big boys listen to the fool. if you boys had spent ½ the time one 10th the money in the last 10 years trying to give the people What you know they want as you have in trying to cut off the poore working man you would have trains running from Frisco to. NY. today both pasinger and freight in 72 hours you know what the people want Speed and you know it of corse you cant take .12. or. 15 big steel cars ½ of them mail bage and express cars and stop every .25.or.30. miles stand 5 and 10 miniuts and do it but you could take.6.or.8. pasinger cars and do it and you could take 30 or 40 box cars and do it but you just wont do it thats all there is to it you hold 40 and 50 cars of time freight in your yards every day.6.8. and oftain 10 hours waiting for another train to come in so you can run 130 or 140 cars in one train.

now if the figures that you have maid in the last 10 years was joined togother and in a straight line it would reach from the north to the south ple and if the money you have spent in the same time was in 20$ gold pieces it would sink the bigest battle ship afloat today and your lone purpose was to cut off the working man and from the fuss you are makeing you have fought and lost the greatest battle of your life for every time you cut a man off he gets him a truck takes your freight and goes huming along the high ways 50 miles an hour and smiles when he passes your yards and sees hundreads of your hundread thousand.$. machines standing on back tracks dead cold as an ice burg in december and all covered with rust. listen 20 years ago i run on a certain R.R. and on the division i run on there was over 200. regular asigned engine crews all under .1 suptentent 1 train master 1 road forman 1 road master today on that same road and on that same division this is less than 60 regular signed engine crews 3 suptentents 3 train masters 4 roadformans 3 road masters. now what are they for you know what they are for and take a tip from me you are far from the only ones who know what they are for. furnish you with figures to cut some poore devel off and every man you cut off is your enemy and dont take no mans word but put out your spies and you will find that the country is working alive with your enemys some of the bigest business men in the country has turned against you

i had a salesman who works for one of the bigest shippers in the south a large tobacco co. in N.C. told me that his co had their figures all made and their plans all cut and dried to do all of this shipping by trucks when ever the time came that they could use 25 and 35 tons trucks and i had a coal opperator to tell me the verry same thing and listen in 10 years you will see highways built for that purpose the people have just bigan to find out that they can do with out you and all on earth you have to do is just follow your present motto and in less than 25 years your R.R. wil be nothing but 2 streakes of rust under the shade of a lot of weeds and bushes. listen you say you have no objections to fair competition there is no such thing as fair competition to the looser so what good will it do you to put a heavy tax on the truck not one bit on earth for the cimple reason the same people that pays your tax is gowing to pay the trucks tax and you say your rates are fixed by the government yes so we all know but who had them fixed have you ever asked for an increase and not get it if you have its not on record you had the guts to ask for an increase right in the heart of the greatest panic that the world has ever known and got it. is it on record where you ever asked for a decrease in rates.

Well the whole thing in a nut shell is just this while you was figering your branes away and spending billions of $ there was another bunch of men with just as much branes and 3.or.4 times the money to back them figuring some way to take your job you have cut off thousands of poore devels but just look what that other bunch has done to you and take a tip from me you have onely one chance just one lone chance and that is bow your stiff necks to the people and do what they want done and do it like they want it done and thats cheaper and faster rates under bid and out run the truck and you will ram a thorn in his side he will feel the rest of his days and marke it down in your heads right now until you do that i am telling you the truck allready has a thorn ramed in your side that you will feel the rest of your days. just cut out your speeches and stuff that your are trying to hand the people in the press and over the radios get right down to brass tacks and do the job you have fought a hard fight for the past 10 years spent billions and billions of $ with just one purpose in your mind (starve the poore working man) and but for the truck you might have won.

listen 12 years ago i know a man that was fired he got a 2 ton truck started out driving it his self today he has 45 truck on the st.s and high ways and does more business in the town which he lives than the R.R. that fired him so now the sooner you do what you know the people want why the better off you will be and the longer you wait the worse off you will be. there was a time when you had the world by the tail with a down hill sling but you have lost your tail holt and never under the sun will you get it back lik you once had it for 75 years you have made the people bow to you but from now on you are gowing to bow to the people its. too bad about your billions and billions billions and more billions of $ you have standing dead cold as an iceburg in december and all covered with rust but who is to blame

listen the good book says be ye not deceived for God is not mocked what soever a man soweth that shall he all so reep. so you done it you done it for a bad purpose and that is why you lost. now Mr. editor you will no doubt laugh at this so would you of laughed 25 years ago if i had told you that you would live to see a man cross the atlantic in less than 36 hours but you have seen it. so please print this just like i have it and from the bottom of my heart i hope to see the R. R. come to the front once again. Yours Respt—

C. W. BURCHEFIELD.

[No, we do not laugh at this, and we do not think that railway men concerned with traffic and public relations problems will laugh at it either. The writer is misinformed in many of his points but his letter is so plainly sincere and representative doubtless of a point of view which many may hold that we are glad to accede to his wishes and reproduce it as nearly as possible as he wrote it. To have made the usual editorial changes would have robbed it of much of its intrinsic appeal.—THE EDITOR.]

New Book

Railroad Construction, Theory and Practice, (Ninth Edition), by Walter Doring Webb. 925 pages. Illustrated, 7 in. by 4½ in. Bound in flexible Fabricoid. Published by John Wiley & Sons, New York. Price $6.

This is the latest edition of the well-known handbook, embracing chapters dealing with various phases of the office and field work entailed in the location and construction of a railway, the physical properties that make up a railway, and the economies of railway location. There are also 242 pages of mathematical tables. According to the author's preface, the book has been extensively rewritten, barring, of course, such portions as give rise to no revisions. However, the full effect of the revisions is not realized by reason of failure to replace old illustrations; for example those relating to track construction tend to discredit the conscientious effort that has been made to bring the text matter up to date. Failure, also, to revise certain portions of the text in the light of present-day practice also serves to mar what is on the whole a commendable treatise.

Odds and Ends . . .

Match King a Former Railroader

It is surprising how many men of prominence have been bitten at one time or another during their careers by the "railroad bug." From the newspaper obituaries of Ivar Kreuger, head of the Swedish match trust, whose suicide in Paris was recent news of world-importance, we learn that even he did not escape. At the time of the World's Fair in Chicago in 1893, or shortly thereafter, he was employed as a lineman on the Illinois Central.

Another Troubled Conscience

A man recently walked into the Canadian Pacific station at Vancouver, B. C., purchased a half-fare ticket from Vancouver to Montreal, paid $50.50, and then tore up the ticket. He thereby took a load off his mind which had been bothering him for some time. Two years ago, on a trip between Vancouver and Montreal, his small daughter had been passed as under five years of age so that no ticket for her was required, when as a matter of fact she was really five and one-half years old and subject to payment of half-fare. This suggests a means of immediate relief to railways in financial distress: Get everyone who has put one over on the railways in the past to pay up in full.

Another Record Train Load

California may have its lumber specials and Kansas its coal specials, but what state in this Union can match the record of Ontario in making up and sending out the first trainload of onions? To the Canadian National fell the honor of handling the train. It moved as a special out of Windsor with officers of the Ontario Onion Producers' Co-Operative, Ltd., and of the Canadian National on board. It was sped on its way by a committee headed by the acting mayor of Windsor, who presented the bills of lading for the shipment to T. C. Hudson, general superintendent of the Southern Ontario district of the Canadian National. Reception committees met the train at other points where it stopped, and in spite of the nature of the cargo, not a tear was shed.

A Modern Miracle

Nothing is impossible. If you had told us before this week that any bus operator would ever admit that the service he rendered was inferior to that rendered by passenger trains, you would have aroused only doubt as to your sanity. Yet here is a report from the St. Louis-San Francisco proudly stating that such a thing has happened. Appearing before the Missouri Public Service Commission recently, the owner of a bus line was given permission to discontinue one of his runs between Cottonwood Point, Mo., and Kennett, via Caruthersville. The last two stations are on the Frisco, and the bus operator, in support of his application for permission to discontinue the bus service, said that the superiority of the rail road service over that provided by the bus line eliminated the need for the latter and also its profits. After this, we shall remain calm and unsurprised, even if some railroad man comes in and tell us that the railways are earning a fair return.

The Oldest Railroad Veteran

Kirby C. Jackson of Chicago, dean of all Pennsylvania enginemen, celebrated his 100th birthday anniversary on March 8. Following 44 years in active railroad service, Mr. Jackson has been on the pension rolls for 30 years. James Buchanan was in the White House and Civil War clouds were rapidly growing darker when Jackson, at the age of 26, began firing a wood-burning locomotive on the old Cincinnati & Peru (now a part of the Pennsylvania) in 1858. Three years later he became an engineman, and he continued to run trains over the Ft. Wayne division until April 1, 1902, when he was retired at the age of 70 under the company's pension regulations. Mr. Jackson is in good health and on his birthday anniversary attended a reception in his honor, at which he was presented with a testimonial in behalf of the railroad by H. E. Newcomet, vice-president of the Pennsylvania, in Chicago.

How Often Could This Happen?

One of those coincidences which cause talk around railroad offices and make copy for this department, occurred recently on the Kansas City division of the Chicago, Milwaukee, St. Paul & Pacific. Engineer Moore and Conductor Ruckman handled fruit train No. 64 between West Yard and Nahant on January 22, 24 and 26. On each of these three trips, the load was exactly 1,818 tons and on each of the three trips also the conductor's records indicated the running time of the train was exactly 3 hr. 5 min. for the 105.3 mile trip.

An Egg Mortality Table

Insurance actuaries who can tell you down to the last decimal what your chances are of being bumped by a taxicab have nothing on the freight claim division of the American Railway Association. The Committee on Freight Claim Prevention knows all there is to know about the mortality of eggs in transit. For instance, they know that if packed with the cups flat—whatever that may be—the chances are 99 in 100 that a case of eggs will be in perfect condition when delivered to the consignee. If the eggs are packed with the cup flat and four excelsior pads, the chances are 97 in 100 that there will be no damage. On the other hand, an average of 1 case in every 12 shipped will be damaged when it is packed with newspapers or various other misfit combinations of packing materials. One case in four will be damaged when packed with the common strawboard flat and only four excelsior pads, and one case in three will be damaged when packed with loose excelsior.

Rule Obedience in the Argentine

The surprisingly effective scheme of railway employees of tying up the railroads through strict obedience of all rules, is beginning to assume an international aspect. In recent issues we have told how the Austrian railroad employees were backing up their demands by delaying service through rigid adherence to all railroad regulations. Now we learn that the railroad employees in Argentina have had the same bright idea. Whenever they want to protest against working conditions, they become very conscientious about the governmental code which was drawn up 30 years ago "to insure the safe and efficient working of all the Argentine railroad systems." Theoretically, these rules are perfect, but when they are all obeyed, travelers and railroad officers are driven to despair. For instance, when a train is about to depart, there is no frantic scurrying around. Instead, the conductor obeys a rule which states that "he shall walk at a normal gait the entire length of the train, examining all doors to see that they are securely fastened, and then return to his post." This the conductor does, and his interpretation of "normal gait" is not on the side of celerity. The regulations also require that the assistant station master, "whose identity shall be well established to the satisfaction of the trainman and the engineer, shall blow his whistle, which is provided for that purpose by the railroad company." Dissatisfied trainmen are inclined to debate at considerable length concerning the identity of the assistant station master, whom they have probably known for years, and even go to the extreme of examining his uniform to assure themselves that he is wearing the official regalia of his office. On one occasion an engineman argued interminably over the question of whether or not the whistle in the possession of the assistant station master was the one provided by the railroad company, or whether some other whistle was being used contrary to the law.

NEWS

How the Unregulated Trucks Injure Trade

Disrupt cement, coal, perishable business bringing ruin to local merchants

General W. W. Atterbury, president of the Pennsylvania, in addressing a meeting of the Economic Club of New York on March 29 outlined some of the harmful effects of unregulated motor truck operations on business other than that of the railroads. Some specific instances of such injury which he mentioned were as follows:

1. The cement industry in Eastern Pennsylvania has been thrown into chaos by the introduction of unregulated truck transportation. No shipper knows his competitor's freight costs and hence finds it difficult to bid intelligently.

2. Unregulated trucking is an anti-social force in its invasion of the merchandising field. Truckers are hauling coal from anthracite mines directly to consumers, thus seriously injuring established retail coal dealers, but without offering a reliable service in its place. Using public property as a place of business they have no fixed property tying them to any particular group of consumers.

3. Industrial trucks going out from cities are bringing return loads of vegetables, which they peddle wherever they can find a market, to the disadvantage of the retail trade.

4. In the great Eastern cities fruit and vegetable markets have been highly systematized with railroad co-operation, keeping the inflow apace with market conditions, thus avoiding the waste of either surpluses or shortages. Such intelligent control, in the best interests of all parties, is being lost because of haphazard truck operations. One day recently in Philadelphia sufficient strawberries were received by rail to care for the normal day's requirements. But this was augmented by tremendous shipments by truck. The supply was far more than the market could absorb, so all shippers—both by rail and truck—lost heavily, thus adding to the already tremendous burdens of agriculture.

"Railroads," said General Atterbury, "were years ago forbidden to transport products of which they were the owners. If it is a sound principle to keep merchandising and transportation separate on the railroads, why is it not equally sound in the case of other forms of transportation? Operators of commercial trucks and buses for hire should be required to obtain permits or certificates of public necessity before engaging in business, and in determining the actuality of such convenience and necessity, the adequacy of exisiting transportation facilities, whether on the railroads or on the highways, is at least an element to be considered.

"I fully realize that both for the good of the country and of the railroads, ways and means must be found in the future for them to carry passengers and haul freight at lower charges than those now in effect. I see no way in which we can hope to attain this end except by lessening the waste involved in unnecessary duplication of facilities and service, and destructive competition. Part of the answer I believe will be found in the economies and more efficient operation possible under sound railroad consolidations. The remainder must largely be realized by avoiding the subsidized and unregulated competition against the railroads, which unfairly and uneconomically drains away the more profitable of their traffic."

Southern Pacific Moves Chicago Office

The Southern Pacific, about May 1, will move its freight and passenger offices from 33 West Jackson boulevard, Chicago, to the Straus building at Michigan avenue and Jackson boulevard.

Mid-West Shippers' Meeting

The next meeting of the Mid-West Shippers' Advisory Board will be held at the Palmer House, Chicago, on April 7. The speakers will be R. V. Fletcher, vice-president of the Illinois Central, who will discuss the tax problem, and Bernard W. Snow, crop statistician, who will talk about the government in business.

Very Low Fares to New York

The Long Island throughout the month of April will sell tickets from all its stations to New York and Brooklyn at one-tenth more than the one-way fare for the round trip; the tickets to be good for one day (including return trains up to 1:30 a.m. the next day). The tickets will be good on all trains except that from Monday to Friday, inclusive, they will not be good in the morning and evening rush hours.

Bill Proposes Port Equalization

Senator Coolidge, of Massachusetts, has introduced in Congress a bill authorizing and directing the Interstate Commerce Commission and the Shipping Board to make a joint investigation into the practicability of equalizing rail rates and ocean rates on export and import freight traffic between points in the United States and points in foreign countries by way of the several United States ports.

Investors May Favor Government Ownership

J. L. Loomis sees possibility of bondholders acquiescing to save investments

A warning that unless railway credit is sustained and supported holders of railroad bonds might be strongly inclined toward government ownership as a means of saving their investment came from James Lee Loomis, president of the Connecticut Mutual Life Insurance Company, in the course of his address before the Security Owners Association in New York on March 23. The other speaker on the general subject of "Sustaining Railway Credit During the Depression" was W. W. Colpitts of Coverdale & Colpitts, engineers. Mr. Colpitts estimated that motor trucks have diverted approximately 12 per cent of the freight traffic that would otherwise move by rail but he produced other figures which indicated that, with present economies in hand, net railway operating income would be in excess of that of 1929 if half the traffic lost since that year were recouped.

With a brief outline of railway financial history and the role of the railways in the development of the country Mr. Loomis introduced his survey of the present plight of the carriers. He found that a co-operative spirit is becoming manifest, citing the "changed sentiment on the part of the Interstate Commerce Commission," the attitude of the Reconstruction Finance Corporation and of organized labor. He added, however, that "we can only sustain or re-establish the carriers' credit by a definite, intelligent program backed by all responsible and interested parties—a program that promises fulfillment and gives assurance of a basis of credit in the future. Funds for investment impressed with a trust cannot, in my opinion, under present conditions, be attracted by new bond issues to the railroad field. There is too strong an element of uncertainty.

"Loans made by the Reconstruction Finance Corporation and by the Railway Credit Corporation will be one- two- or three-year loans. There must be the establishment of a security base prior to the maturity of these temporary loans, justifying institutional investors continuing in and returning to the railway field. If this is not accomplished, then we must be prepared to face a political, and an economic, and a financial problem of the greatest magnitude..... If the railway fabric is not sustained and supported and if its credit becomes definitely impaired,

it is not beyond the range of possibility that corporate trustees might be moved more strongly in the direction of saving their investment through the medium of government ownership than to watch it shrink in value as private property under an ineffective management—ineffective because the responsibility of control, supervision and direction is so widely spread and divided."

Continuing, Mr. Loomis advocated the retroactive repeal of recapture, the speeding of consolidation and the equalization of competition as between the railways and other agencies of transport. In this connection Mr. Loomis outlined the manner in which inland waterway development has burdened the taxpayer and suggested that "Any artery of commerce that will not pay its fair share of tax and a fair return upon the investment of public moneys in that enterprise and the upkeep of the property, is economically unsound and ought not to be maintained by the taxpayers."

Railroad taxes, the speaker continued, must be reduced; the rate structure must be protected against whittling and finally the wage scale must be adjustable to conditions since "Railway labor is safe in its occupation only if the industry is safe. Whatever is necessary by adjustment of wages or modification of working rules to attain the desired end must be done."

Mr. Colpitts opened his remarks with a discussion of the present depression's effect on the railways and proceeded to a consideration of the part played by highway competition. The passenger automobile, he thought, had in the main created its own traffic while truck competition was at present increased because many of the unemployed have entered the business of operating on the highways. After considering also the aeroplane, pipe line and waterway competition Mr. Colpitts refused to concede that the railways were becoming supplanted; he rather contended that "in the natural evolution of transportation in these past 10 years of great mechanical advancement in every direction the railroads have stood their ground remarkably well."

This speaker next paid tribute to the late S. Davies Warfield, founder of the Security Owners Association, and to Mr. Warfield's work in framing the Warfield Plan, a large part of which found its way into the rate-making provisions of section 15-A of the Transportation Act. He pointed out how this act was thought to assure adequate protection to all interests and how all failed to forsee that the I. C. C. would fail to establish rates to permit the fair return contemplated. Events since 1920, Mr. Colpitts conceded have been discouraging to railway managers and investors alike but he added that most friends of the railroads "wait until a catastrophe happens before we undertake protective measures. We make speeches, send out literature, but mostly I fear to those already convinced. But do we actually take the steps that any other great business organization would take to protect itself against unfair discrimination?"

Investors in the future, Mr. Colpitts held, must have positive assurance that section 15-A will be lived up to; that the rate of return fixed by the I. C. C. will be realized; that the railroads will not be discriminated against in favor of other transportation agencies; that the indirect subsidies to railway competition will be discontinued and that in general competition in the transport field will be equalized.

In response to a question as to his attitude on the proposed substitutes for section 15-A Mr. Colpitts said that he takes the same position as the *Railway Age* and favors the present language to the flexible rules proposed. He thought that a flexible provision would in time tend to become less distinctive whereas the present rule gives a definite, mathematical basis for rate making.

Referring to the prospects for the future Mr. Colpitts pointed out that since federal control the railroads have reduced the cost of moving freight 30 per cent and the cost of moving passenger trains 17 per cent. This he called a remarkable achievement in internal economies but he thought that much remained to be done in the way of external economies through the elimination of competitive wastes. With economies already effective in mind Mr. Colpitts, in closing, presented estimates of what net railway operating income will be when an upturn in traffic comes. These estimates, which take no account of the 10 per cent wage reduction, indicate that when one-half the traffic lost since 1929 is recovered the net railway operating income for the United States as a whole will be $1,311,000,000 as against a 1929 net railway operating income of $1,275,000,000.

A. R. E. A. Schedules Next Convention

March 13, 14 and 15, 1933, were chosen as the dates for the thirty-fourth annual convention of the American Railway Engineering Association, at the meeting of the new board of direction which was held immediately after the close of the thirty-third convention on March 16. This definitely provides for a three-day convention with the proviso that it may be cut to two days if conditions again make such action advisable.

Union Pacific Industrial Development in Portland

The Union Pacific has purchased 30 acres of land in Portland, Ore., for industrial use. A contract has been given the Puget Sound Bridge & Dredging Co., for 600,000 cu. yd. of hydraulic fill to bring to grade this tract which adjoins the Argo yards. Water mains and sewers will be installed and industrial spurs will be constructed to adapt the property for use by industries.

Coach Excursions from Atlantic Seaboard to Colorado

At a meeting of the executive committee of the Western Passenger Association at Chicago on March 23, western carriers agreed to participate with eastern carriers in a series of one-cent-a-mile coach excursions from points on the Atlantic Coast to points in Colorado during July and August. Under the arrangements, coach excursions will be operated on July 2, 16 and 30 and August 13 from New York, Philadelphia and Baltimore to Denver, Colorado Springs and Pueblo, at a rate of $85 for the round trip.

Master Appointed for Wabash

Forrest C. Donnell, an attorney, has been appointed special master in the Wabash receivership case by Federal Judge Charles B. Davis. He will hear all creditors' claims, intervenors and similar motions and make recommendations to the court. Judge Davis has authorized the receivers to pay $55,308 interest due April 1 on first mortgage bonds, and $110,906 in quarterly interest on $9,750,000 loans from various banks.

Ten Hour Day For Bus Drivers

The Governor of New York has approved the "Wheatley bill" as Chapter 471 of the laws of 1932, which amends the state labor law by a provision that no employee operating a bus or truck shall be employed more than ten consecutive hours, including time for meals; and providing for at least eight hours off duty. This act does not apply in the operation of motor vehicles entirely within the limits of a city or first-class village.

N. Y. C. to Increase Shop Work

The New York Central Lines plan an increase in activity in repairs to equipment during the month of April. Passenger car shops at West Albany, N. Y., Beech Grove, Ind., and Allston, Mass., will reopen on April 4; also on that date locomotive shops at West Albany, Beech Grove, Collinwood, Ohio, Jackson, Mich., St. Thomas, Ont., Bucyrus, Ohio, and West Springfield, Mass., will reopen. This will involve the employment of approximately 7,000 men.

D. L. & W. "Collegiate" Special

In order to attract the patronage of Cornell University students bound for their homes in New York City and vicinity for the Spring recess, the Deleware, Lackawanna & Western, on April 1, operated a "collegiate" train between Ithaca, N. Y., and New York. For the occasion the railroad added to its Red and White Special a car especially fitted for dancing and another with a buffet lunch counter where sandwiches, coffee and beverages were sold during the trip.

Northern Pacific Tax

A temporary injunction restraining 22 counties in Washington from seizing property of the Northern Pacific was granted by Federal Judge J. Stanley Webster on March 26, the railroad posting a $50,000 bond to guarantee the counties against any loss that might result from the issuance of the temporary injunction. The motion for the restraining order declares that the counties levied $1,088,515 personal property taxes against the railroad in three years, 1927, 1928 and 1929, and the railroad paid $709,671, leaving $378,844 unpaid. The plaintiff alleges that it paid far in excess of the amount of personal prop-

erty taxes lawfully due for each of the three years, and that each defendant county is indebted to the plaintiff in a large sum for overpayments.

Railroad Asks Injunction Against Recapture Order

Another recapture case has been taken to court. The Jonesboro, Lake City & Eastern on March 19 filed in the federal court for the eastern district of Arkansas a petition for an injunction against the order of the Interstate Commerce Commission of November 21, 1931, directing the company to pay the commission $15,-272 as representing half the amount of its excess net railway operating income for the years 1922 and 1923 as found by the commission, after payment of $42,450 already made in partial liquidation of its obligations under Section 15a of the interstate commerce act.

Decrease in Grade Crossing Accidents

Fewer persons lost their lives in accidents at railroad highway grade crossings in 1931 than in any year since 1922, according to reports for the year compiled by the Safety Section of the American Railway Association. Complete reports show 1,811 persons killed (a reduction of 209 or 10.3 per cent) and 4,657 persons injured.

Class I railroads in 1930 spent $33,-070,708 for additional protection at or the elimination of highway grade crossings. Of that amount, the railroads alone spent $30,218,124 for separation of grades, while the sum of $2,852,584 was expended for additional automatic warning devices, gates, signals and signs.

C. N. R. Deficit in February

Gross revenue of the Canadian National for the month of February, 1932, were $11,004,397, a decrease of $2,409,666 from the figures of the corresponding month of 1931. Operating expenses were reduced by $1,990,785 from the total of February, 1931, being $11,593,825 in February, 1932. There was a net revenue deficit for the month of $589,428.

For the two months' period to February 29, gross revenues were $21,952,726, a reduction of $5,218,212 from the figure for the corresponding period of 1931. Operating expenses during the two months of 1932 were $23,130,277, a reduction of $4,723,137, leaving a net revenue deficit for the two months of $1,177,551 as against a net revenue deficit of $682,477 in the same period of 1931.

Second and Third Class Fares to the Northwest

Carriers serving the northwest will place second and third class fares in effect from Chicago to the Pacific coast on May 1, the rates being similar to those in effect from January 1 to June 30, last year. Under the new traiff passengers in a day coach can travel from Chicago or St. Louis to any of the Pacific Northwest cities for $40, as compared with the regular fare of $77.21. If one travels in a tourist sleeping car, the railway fare is $65. The same rates will apply eastbound and also between intermediate points where the regular one-way fare is higher than the through coach and tourist fares. The Pacific Coast cities to and from which the rates will be effective are Seattle, Wash., Tacoma, Portland, Oregon, Victoria, B. C., and Vancouver. The rates are the same as those which have been in effect between Chicago and California since January 1, 1931.

I.C.C. Finds Additional Barge-Rail Rates on Cotton Not Needed

The Interstate Commerce Commission has dismissed a complaint filed by the Inland Waterways Corporation asking for the establishment of additional through barge-rail routes and joint rates on cotton from points in the South and Southwest to New Orleans and Mobile on the ground that they are not necessary or desirable in the public interest. In the same proceeding it has found not justified certain barge-rail rates on cotton from certain points in Oklahoma and Texas to New Orleans, proposed by the railroads in 1929 and suspended, and has ordered them cancelled without prejudice to the filing of new rates in accordance with the report.

Associated Traffic Clubs' Meeting

At the semi-annual meeting of the Associated Traffic Clubs of America, which will be held at the Hotel Lowry, St. Paul, Minn., on April 27-28, the speakers thus far selected include Milton W. Harrison, president of the Security Owners Association, who will talk on The Effect of the Railroad Crisis on Banks, Insurance Companies and Trusteeships; C. E. Childe, traffic director of the Omaha Chamber of Commerce, who will talk on Motor Vehicle Transportation; Dr. Howard C. Kidd, professor of commerce and transportation of the University of Pittsburgh, who will talk on Intercoastal Steamship Regulation; and J. M. Fitzgerald, vice-chairman of the Committee on Public Relations of the eastern railroads, who will talk on Some Phases of Inland Waterway Transportation.

New York Central Advances Commutation Fares

The New York Central will increase its suburban fares to and from New York City, on April 1, by 25 per cent on regular monthly tickets and 20 per cent on school and family tickets. This advance, on short notice, is made by authority of the New York State Public Service Commission acting on the application of the company, made more than a year ago, for authority to increase these rates about 40 per cent; and the smaller increase is in the nature of a compromise prescribed by the commission for a period of five months. The hearings on the protests of passengers against the 40 per cent increase have been continued from time to time until, under the statute the 40 per cent higher rates would go into effect on April 1 without action by the commission; and the compromise has been agreed upon to give the protesting passengers time to present further evidences of their claim that the proposed increase of 40 per cent is unreasonable.

Associations, formal or informal, from New Rochelle, Mount Vernon, Yonkers, and other places, have engaged counsel, the city governments in some cases helping to pay for the counsel, and have protested that the old rates are high enough; are based on false estimates of the cost of the service.

Under the new compromise rates the regular monthly ticket fares are still on a lower basis than those of the New York, New Haven & Hartford which serves a part of the same territory.

C.P.R. Net Almost at 1931 Level

The statement of earnings for the month of February by the Canadian Pacific shows the small decline of $37,804 in the month's net revenues. Gross continues lower, but this decline has almost been counterbalanced by the reduction in operating expenses. Gross for the month at $9,043,278 compares with $10,811,445, a reduction of $1,768,167. Expenses at $8,813,843 are lower by $1,730,363, leaving net at $229,434, against $267,238 in 1931, a decline of $37,804, as noted above.

For the two months' period ended February, the showing is as follows: Gross revenues were $4,468,178 lower at $18,247,249, but operating expenses were reduced by $4,185,605 to $17,400,336, leaving net for the two months $846,914, against $1,129,486 in the same period of 1931, a reduction of $282,573.

I.C.C. To Hold Hearings on Six-Hour Day

As directed by the joint resolution recently passed by Congress, the Interstate Commerce Commission on March 28 announced a proceeding of investigation as to the effect upon operation, service, and expenses of the application of the principle of a six-hour day in railway employment, and assigned it for hearing at Washington, beginning on May 11, before Division 6. All common carriers by railroad subject to the interstate commerce act were made respondents and will be called upon to present by qualified witnesses as to what would be the effect. After the carriers have been heard, representatives of each particular class of railway employees who are qualified to testify as to the subiect will be called. Upon completion of the hearings the commission will decide and announce the order of its further procedure. Under the resolution it is directed to report to Congress by December 15.

B. & O. Train-Broadcast Successful

Radio broadcast from a moving train was successfully consummated Sunday evening, March 27, on the Baltimore & Ohio. The quality of reception was almost equal to that from the usual studio of the broadcast station, just enough of the train sounds coming through to provide atmosphere and let the listener know where the program was coming from. There was slight fading at short periods when the train was passing nearby build-

ings, bridges and other objects which cause interference, but this fading was not of sufficient degree or duration to materially affect the quality of reception.

The studio was a dining car running between Washington, D. C. and New York. The program was sent from the car by short wave to pick-up stations at Beltsville, Md., 10 miles from Washington, and at Laurel, 20 miles from Baltimore. From these stations the program was sent by wire to radio broadcast station WABC and a nation-wide net work.

Illinois Manufacturers Urge Repeal of Section 15-A

The board of directors of the Illinois Manufacturers' Association has adopted a resolution, declaring that the present financial condition of the railways is the most deplorable in their history and urging repeal of the recapture provision of Section 15-A of the Transportation Act, such repeal to be retroactive in its application. The resolution, copies of which have been sent to Senators Otis F. Glenn and James Hamilton Lewis, also recommends the repeal of the "present rigid rate-making provision of Section 15-A" and suggests that there be enacted in its stead a flexible rate-making provision such as is proposed by the carriers. The directors also asked for the repeal of Section 19-A and proposed that in its stead there be enacted a provision that the railroads furnish to the Interstate Commerce Commission from time to time a statement of additions, betterments and improvements, which, together with the work already compiled, will constitute all that is valuable to the public in the present valuation provisions of that section.

Club Meetings

The Indianapolis, (Ind.) Car Inspection Association will hold its next meeting at Hotel Severin, Indianapolis, on Monday evening, April 4, at 7 o'clock. The principal speaker will be J. T. Thomas, agent of the Baltimore & Ohio, at St. Louis.

The Northwest Car Men's Association (St. Paul) will hold its next meeting on Monday evening, April 18, at the Minnesota Transfer Young Men's Christian Association. Edward F. Flynn will speak on transportation problems.

The Canadian Railway Club will hold its next meeting on Monday evening, April 11, at the York Room, Windsor Hotel, Montreal. W. A. Newman, chief mechanical engineer of the Canadian Pacific will present a paper on the multi-pressure locomotive, No. 8000, accompanied by motion pictures.

The Pacific Railway Club will hold its next meeting on Thursday evening, April 14 at Hotel Oakland, Oakland, Cal. The discussion will be on the classification and preparation of cars; and the principal speakers will be J. P. Quigley, Western Pacific, and O. L. Wright, Santa Fe.

The Central Railway Club of Buffalo (N. Y.) will hold its next meeting on Thursday evening, April 14, at the Hotel Statler, Buffalo. F. S. Welsh, vice president of the Merchants Despatch will present a paper on refrigeration experience in perishable transportation, illustrated by motion pictures.

The New England Railroad Club will hold its next meeting on Tuesday evening, April 12, at the Copley-Plaza Hotel, Boston. C. E. Barba, mechanical engineer of the Boston & Maine, will speak on locomotive front ends.

Shop Wage Reduction in Canada

The All-Canadian Federated Shop Trades, numbering some 30,000 mechanics on more than a half dozen Canadian railroads, will take a 10 per cent cut in pay for one year dating from April 1, it was announced in Montreal this week. The reduction will mean a saving of $2,000,000 annually to the companies.

Under the new agreement, which terminates on March 31, 1933, provision is made for a 10 per cent reduction in the monthly compensation of the men—"maintaining the basic rates of pay." The companies affected include the Canadian Pacific, the Canadian National, the Dominion & Atlantic, the Temiskaming & Northern Ontario, the Toronto, Hamilton & Buffalo, the Quebec Central, the Northern Alberta and the Esquimault & Nanaimo railways.

Meanwhile maintenance of way employees, with a membership of 40,000 section men, switchmen and general laborers, is faced with a similar cut and will start negotiations with the companies next week.

Full-Crew Bills Introduced in Congress

Federal full-crew bills, such as have been advocated by the railroad labor organizations, were introduced in Congress on March 28 by Senator Wheeler, of Montana, as S. 4234, and Representative Shallenberger, of Nebraska, as H. R. 10,885, "to promote the safety of employees and travellers upon railroads by compelling common carriers by railroad engaged in interstate and foreign commerce to man locomotives, trains, and other self-propelled engines or machines with competent employees, to provide the least number of men that may be employed on locomotives, trains, and other self-propelled engines or machines, to provide qualifications for certain employes, and providing a penalty for the violation thereof."

The bill defines "full crews" for various classes of service and provides that they shall be made up of "competent" employees as defined in a couple of pages of specifications. For a passenger train of less than five cars the bill provides for engineer, fireman, conductor and brakeman. For a train of five or more cars carrying passengers, or of 10 or more cars none of which is carrying passengers, an additional brakeman would be required.

For a freight train of less than 50 cars, a full crew would be five men and for a train of 50 or more cars three brakemen would be required. Three would also be required for a local freight train doing any switching or unloading of freight. A yard crew would consist of five men and for locomotives operated over or upon a highway or street within the corporate limits of a municipality an additional yard brakeman or helper would be required. For a single locomotive a crew of three men is proposed.

New C. & O. Train, the "George Washington"

On April 24 the Chesapeake & Ohio will put into service the first air-cooled sleeping-car train, to be known as the "George Washington," to be run between Washington, Cincinnati and Louisville. The train will be operated on a new and faster schedule so arranged as to connect at both ends of its route with the best trains of other railroads.

The air-conditioning system is to be a new one developed and controlled by the Pullman Company. The new train is appropriately named for the first President because George Washington was born, lived, died and won the independence of the United States near the route of the C. & O. and because, as one of the first to perceive the importance of providing a means of communication and transportation between the outposts of the Ohio and Mississippi river basins, he surveyed and built a trail over the Blue Ridge and Allegheny mountains along what is now the route of the C. & O. Washington also was the first president of the James River Company, organized to develop roads and canals, whose properties and rights of way later became the property of the Richmond & Allegheny Railroad, now a part of the James River division of the C. & O.

Condition of Agriculture Not Determinative of Grain Rates

The Western railroads have asked the Interstate Commerce Commission to broaden the scope of the re-opened proceedings in the western grain rate case, in which the commission's order was set aside by order of the Supreme Court of the United States, so that the hearing will not be limited too closely to considerations of the condition of agriculture. According to the petition the commission's orders for further hearings regarding changed conditions since the close of its former hearings "give such prominence and weight to evidence of the condition of an industry as to minimize, or perhaps nullify, the probative effect of evidence of the various factors which are normally considered in rate-making."

"Such a definition of the issues on rehearing," the petition says, "is tantamount to a declaration by the commission that evidence of conditions in the agricultural industry, and particularly in that branch concerned with shipping grain and grain products, is probative and competent in, and material and relevant to, the determination of the proper general level of rates on such commodities to be prescribed and imposed. Such a definition of the issues has the effect of a declaration by the commission that the prosperity of an industry justifies a higher level of rates than that which under accepted standards would be just and reasonable, and conversely, that the lack of prosperity of an industry justifies a lower level of rates

than that which under accepted standards would be just and reasonable. Petitioners suggest to the commission that this is not the law, and that the prosperity or lack of prosperity of an industry, as distinguished from the value of the commodity, is not among the factors to be considered in determining the proper level of rates for the transportation of the products of that industry."

Accidents Reduced in Canada

During the calendar year 1931 the Canadian Railway Board's chief operating officer investigated a total of 2,429 railway accidents, covering 317 persons killed and 2,680 persons injured, as compared with a total of 2,427 accidents reported in 1930, covering 425 persons killed and 2,512 persons injured. In 1931 of the persons killed nine were passengers, as compared with 17 in 1930, and the number of passengers injured in 1931 was 426, as compared with 308, an increase of 118. Fifty-one employees were killed in 1931, as compared with 95 in 1930, a decrease of 44. The number of employees injured in 1931 was 1,531, as compared with 1,462 in 1930, an increase of 69. In 1931 a total of 257 others were killed, as compared with 313 in 1930, a decline of 56, while the number of others injured in 1931 was 723, as compared with 742 in 1930, a decrease of 19. Of the 257 others killed in 1931, 142 or 55 per cent were trespassers, and of the 723 others injured, 200 or 27 per cent were trespassers.

During 1931 there were 317 highway crossing accidents reported to the Board, covering 98 persons killed and 456 persons injured, as compared with 342 accidents in 1930 covering 116 persons killed and 470 injured. In 1931 nineteen highway diversions were constructed, making it possible to close 19 crossings and eliminate traffic from 11 crossings. During 1931 a total of $1,017,739.38 was spent out of the Railway Grade Crossing Fund.

Great Lakes Shippers' Board

The Great Lakes Shippers' Regional Advisory Board held its ninth annual meeting at Toledo, Ohio, on March 23, with an attendance of about 500. The reports of commodity committees indicate that the expected volume of freight traffic for the second quarter of the year will be 20 per cent less than the movement of the second quarter last year. In potatoes the committee expects a demand for 1,750 cars, which is 78 per cent more than the quarter's movement last year, but in nearly every other product the expectation is for considerable decreases. Some of these are: Grain 12.4 per cent, hay 19.6, coal and coke 16, ore 35, gravel 29, lumber 22, iron and steel 11, machinery and boilers 27, cement 18, brick and clay 28, lime and plaster 20, agricultural implements 28, automobiles 28, fertilizers 17, paper, etc. 19.

The board adopted the recommendation of the executive committee, favoring the repeal of the recapture clause of the Transportation Act, 1920; and a resolution was adopted condemning the suggestion to change the law so as to forbid shippers to route their freight. Carl R. Gray, Jr. vice-president of the Chicago, St. Paul, Minneapolis & Omaha, spoke on the general railroad situation, setting forth some of the fundamentals.

J. W. Montigney was re-elected president of the board and C. B. Tefft, Toledo, general secretary.

C. N. R. Tie Purchases Lead to Wrangle in Commons

Purchase of ties and other materials by the Canadian National was a sufficiently large matter to cause a full dress vote in the House of Commons at Ottawa last week and at another sitting of that week to elicit charges from the leader of the Opposition, Rt. Hon. W. L. Mackenzie King, or the repetition of others' charges that there were wrongful disbursements in connection with ties and other materials.

The division of the House came one afternoon when a motion of Thomas Reid, a British Columbia Liberal, calling for documentary information about tie purchases in his province, was called. Usually there is not even discussion of such motions for papers and they are promptly passed, but when this motion was called the Minister of Railways, Hon. Robert J. Manion, said he would oppose the motion, and a debate began between him and the Liberal leader, resulting finally in a vote of 77 for the motion and 110 against.

Dr. Manion insisted that it was the policy of the present government as well as the preceding one that details of operating and purchasing information of this character could not be made public without detriment to the railway and the national welfare. Mr. Mackenzie King maintained that the expenditures were not a railway matter but were authorized under the unemployment relief act.

Regulation of Itinerant Truckers Asked

Regulation of "itinerant and irresponsible" truckers such as are engaged in the handling of fruits and vegetables in competition not only with existing transportation agencies but also with the established marketing agencies was urged by J. R. Van Arnum, traffic manager of the National League of Commission Merchants, at the hearing before the Senate committee on interstate commerce on March 22 on the Couzens bill. Legislation which does not include such carriers, who are neither common carrier nor contract nor charter truckers, nor producers or dealers, he said, "would leave untouched the really vital elements in so far as they affect the entire perishable industry." Coincident with the diversion of traffic from rail to truck, Mr. Van Arnum said, has been the development of a tremendous number of truck owners who have engaged in the practice of acquiring truck loads of cull or understandard commodities either at sacrifice prices or in many instances for nothing. "Almost countless thousands of trucks of commodities of this character have been moved to markets which had a sufficient supply of standard goods to be sold at any price that could be obtained, with the consequent complete demoralization of the supply and demand for that particular city and the price." He proposed that regulation should require all truck operators engaged in interstate commerce to obtain from the federal administrative bureau, presumably the Interstate Commerce Commission, a certificate which would prove their responsibility and would also justify the need for a transportation service between specifically named points of origin and destination, and that the application for the certificate should show that the applicant had representatives or agents with fixed addresses located in all of the localities in which he proposed to operate.

Southern Finds That Reduced Rates Build Traffic

The Southern on March 19 handled 2,044 passengers in an excursion, for which Pullman service was available from North Carolina and Central Virginia points to Washington, D. C. This was the first excursion in Southern territory for which special Pullman rates were offered. The entire movement was handled in 18 coaches and 26 sleeping cars, the latter averaging 32 passengers each.

In the opinion of the passenger traffic department of the company the success of the excursion offered further "evidence that the public can be induced to use the rail lines where attractive excursion fares are offered and satisfactory arrangements are made for their comfort. Revenue results from this excursion were most satisfactory and indicate in no uncertain way that passenger traffic by 'volume' is remunerative."

The company is offering every kind, class and description of round-trip fares, in the form of Sunday and week-end rates, two- and six-day rates, multiple forms of tickets, coach excursions to and from a limited territory, special excursions, personally conducted tours, special and regular summer and winter tourist fares, in addition to a multiplicity of fares for conventions, special occasions and other meetings."

Industrial Traffic Managers as Railroad Agents

The Interstate Commerce Commission has made public a letter by Commissioner Aitchison to John S. Burchmore, Chicago, replying to one in which Mr. Burchmore had stated that the traffic manager of one of his clients, a concern of considerable importance, had advised him of a request that he accept appointment as "commercial agent" for a railroad company whose lines are in a distant state, his compensation to be paid at the rate of a certain sum per car on all the carload traffic for which he secures routing over the employing railroad. His views were requested as to the legality of such employment.

"You advised the traffic manager that it was your opinion that such an arrangement would involve a certain violation of the spirit if not the letter of the Elkins act and of the interstate commerce act." Commissioner Aitchison said, "You were then informed that the arrangement in question had been made with at least two other traffic managers connected with industries and that it has

applied on the traffic of their individual concerns. You further state—It is further indicated that these facts are well known to your Division of Inquiry which has not taken any steps to indicate the commission's disapproval. The director of the Bureau of Inquiry advises me that he has no specific information concerning practices of this kind

"You then inquire if the commission has made any rulings or announcements on this question, and whether it is my view that a railroad employee engaged in the solicitation of traffic may properly be compensated by a commission on the carload traffic of any industry with which he has any personal connection, even though such commission does not pass to the shipping concern itself.

"The provisions of the Elkins Act are broad and drastic. If a situation of the kind you mention were brought to our attention it would be investigated, and if the facts developed upon such investigation warranted such action, the matter would be presented through the proper channels to the grand jury with a view to having indictments brought under the Elkins act.

"In this connection it might also be well to call your attention to the fact that matters of this kind will be gone into by the commission in Ex Parte 104, Part IV, dealing with traffic expenses."

New York Travel Fell 8.63 Per Cent in Year

A reduction of 36,375,314 or 8.63 per cent in the number of commuters and other passengers traveling to and from New York City by railroad and ferry in 1931, is shown in the annual compilation of the Suburban Transit Engineering Board. The total figures were 385,060,791, compared to 421,436,105 in 1930.

Of the 385,060,791 passengers entering and leaving New York in 1931, 268,222,525 were classified as railroad commuters against a total of 288,159,666 in the same classification for 1930, showing a decrease of 19,937,135 or 6.92 per cent; 81,939,093 were classified as full fare railroad passengers, against a total of 95,379,090 in the same classification for 1930, a decrease of 13,439,997 or 14.09 per cent; furthermore the passengers who did not use a railroad for any part of their journey, classified as local ferry passengers, amounted to 34,899,173 for 1931 against 37,897,355 for 1930, a drop of 2,998,182 or 7.91 per cent.

As all of these figures represent two-way traffic, the number of riders actually entering the city would be about one-half of the amount given, or 192,530,395, and of whom 134,111,262 represent the railroad commuters.

On a daily basis, counting about 330 full traffic days in the year, 584,802 passengers of all classes used the railroads and ferries into New York daily, of whom 407,344 were railroad commuters and 54,005 local ferry passengers. The difference, 123,453 passengers, is the estimated number of average daily visitors to the city. In 1930, the estimated number of daily passengers was 640,710, of whom 437,717 were railroad commuters, 59,225 local ferry passengers, and 143,768 daily visitors.

The Suburban Transit Engineering Board figures showed that Grand Central terminal ranked third in the list of city railroad terminals by traffic, with 44,415,481 passengers, compared with 62,458,905 for Pennsylvania station, and 63,935,727 for the Cortlandt Street terminal of the Hudson & Manhattan.

Washouts in Western Washington

Traffic was restored over the Chicago, Milwaukee, St. Paul & Pacific main line crossing the Cascade range in Washington on March 17, after a 20-day suspension of train service because of severe washouts and other damage to the roadway between Ragnar, Wash., and Garcia, a short distance west of the Snoqualmie tunnel.

This trouble was occasioned by a chinook wind and a three-day rain which, melting a large part of the winter's accumulation of snow on the Pacific slope of the range, produced a run-off of unprecedented volume on the steep mountain sides carrying down an enormous volume of debris, largely tree trunks. Much of the damage was due to the sudden release of water after being impounded by log jams.

The most serious damage suffered by the Milwaukee's line, and which gave rise to the long delay in restoring traffic was the loss of two high embankments, one 600 ft. long and 110 ft. high and the other 320 ft. by 90 ft. Serious damage was also done to the steel viaduct across Change creek, where impact from debris knocked one column of a 120-ft. bent off its pedestal, although without severe distortion of the other members of the tower. Trains were detoured over the Northern Pacific between Easton, on the east slope of the Cascades, and Black River Junction, south of Seattle, a distance of about 69 miles. This traffic arrangement was instituted after a delay of about 24 hours during which the Northern Pacific main line was also out of service by reason of minor washouts and slides on its own crossing of the range and its transcontinental trains were detoured via Vancouver, Wash., running over the Spokane, Portland & Seattle between that point and Pasco.

The Change Creek viaduct, at the east end of the affected territory, was restored to service by the erection of double frame bents on each side of the injured steel bent, thereby permitting work equipment and material to be moved to the site of one of the major washouts. Moreover, the new steel required for the repair of the tower was ordered at once, and was fabricated, delivered and erected before the breaks in the line at other points had been closed.

At the site of the 600-ft. embankment, a "shoo-fly" location was adopted that threw the line about 50 ft. farther up the ravine, where the ground is higher and the gap could be closed by building a frame trestle 220 ft. long. At the other location a skid pile driver was brought in from the west to drive pile bents with cut-offs about 34 ft. below grade and, as this work proceeded, frame bents 32 ft. high were erected on the pile bents.

These disastrous weather conditions were general, and there were simultaneous interruptions to traffic on many other lines in western Washington. Three branch lines of the Milwaukee were affected. Washouts occurred on the Bellingham line, on the Tacoma & Eastern at Mineral, and on the Everett Line at Monroe, the last two resulting in traffic interruptions of about 10 days. The Northern Pacific, also, had one or more washouts of culverts or small bridges as well as side hill slides on a number of its branch lines.

Washouts on the Great Northern at Seward and Odessa in central Washington as a result of high water in Crab creek resulted in a temporary disruption of train schedules between Spokane and Seattle late in February. The Great Northern, however, experienced no break in its line over the Cascade range, as incorrectly stated in a brief item on page 512 of the *Railway Age* of March 19.

Meetings & Conventions

The following list gives names of secretaries, date of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION.—T. L. Burton, Room 5605, Grand Central Terminal Building, New York City.

ALLIED RAILWAY SUPPLY ASSOCIATION.—F. W. Venton, Crane Company, 836 S. Michigan Blvd., Chicago. To meet with Air Brake Association, Car Department Officers Association, International Railroad Master Blacksmiths' Association, International Railway Fuel Association, International Railway General Foremen's Association, Master Boiler Makers Association and the Traveling Engineers' Association.

AMERICAN ASSOCIATION OF FREIGHT TRAFFIC OFFICERS.—W. R. Curtis, F. T. R., M. & O. R. R., Chicago, Ill.

AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.—E. L. Duncan, 332 S. Michigan Ave., Chicago.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—W. C. Hope, C.R.R. of N. J., 143 Liberty St., New York.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—F. O. Whiteman, Room 800, 1017 Olive St., St. Louis, Mo. Next meeting, June 14-16, 1932, Hotel Statler, Detroit. Mich.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, Poole Bros., Inc., 85 West Harrison St., Chicago. Next meeting, Jan. 21, 1933.

AMERICAN ASSOCIATION OF SUPERINTENDENTS OF DINING CARS.—F. R. Borger, C. I. & L. R. R., 836 Federal St., Chicago. Next meeting October, 1932, Washington, D. C.

AMERICAN ELECTRIC RAILWAY ASSOCIATION.—Guy C. Hecker, 292 Madison Ave., New York.

AMERICAN RAILWAY ASSOCIATION.—H. J. Forster, 30 Vesey St., New York, N. Y.

Division I.—Operating.—J. C. Caviston, 30 Vesey St., New York. Next meeting October, 1932, Washington, D. C.

Freight Station Section.—R. O. Wells, Freight Agent, Illinois Central Railroad, Chicago.

Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York.

Protective Section—J. C. Caviston, 30 Vesey St., New York. Annual meeting, May 24-25, 1932, Hotel Pennsylvania, New York.

Safety Section.—J. C. Caviston, 30 Vesey St., New York. Next meeting October, 1932, Washington, D. C.

Telegraph and Telephone Section.—W. A. Fairbanks, 30 Vesey St., New York

Division II.—Transportation—G. W. Covert, 59 East Van Buren St., Chicago.

Division III.—Traffic—J. Gottschalk, 143 Liberty St., New York.

Division IV.—Engineering—E. H. Fritch, 59 East Van Buren St., Chicago.

Construction and Maintenance Section.—E. H. Fritch, 59 East Van Buren St., Chicago.

Electrical Section.—E. H. Fritch, 59 East Van Buren St., Chicago.

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York. Annual meeting May 10-11, 1932, Stevens Hotel, Chicago.

Division V.—Mechanical—V. R. Hawthorne, 59 East Van Buren St., Chicago. Next convention, June 23-24, 1932, Congress Hotel, Chicago

(Continued on page 586)

Annual Reports

Canadian Pacific Railway Company

FIFTY-FIRST ANNUAL REPORT
of the
DIRECTORS OF THE CANADIAN PACIFIC RAILWAY COMPANY.
YEAR ENDED DECEMBER 31, 1931.

To the Shareholders:

The accounts of the Company for the year ended December 31, 1931, show the following results:—

Gross Earnings		$142,337,648.25
Working Expenses (including all taxes)		116,654,776.02
Net Earnings		$25,682,872.23
Special Income		10,951,963.74
		$36,634,835.97
Deduct Fixed Charges		22,050,364.05
Surplus		$14,584,471.92
Contribution to Pension Fund		750,000.00
		$13,834,471.92
From this there has been charged a half-yearly dividend on Preference Stock of 2 per cent, paid October 1, 1931	$2,665,558.60	
And there has been declared a second half-yearly dividend on Preference Stock of 2 per cent, payable April 1, 1932	2,745,138.42	5,410,697.02
		$8,423,774.90
There has been charged three quarterly dividends on Ordinary Stock of 1¼ per cent each, paid June 30, 1931, October 1, 1931, and December 31, 1931	12,562,500.00	
And there has been declared from surplus, a further quarterly dividend on Ordinary Stock of 1¼ per cent, payable April 1, 1932	4,187,500.00	16,750,000.00
Leaving a Balance chargeable to Surplus		***$8,326,225.10***

SPECIAL INCOME FOR YEAR ENDED DECEMBER 31, 1931

Net Revenue from Investments and Available Resources, Exhibit "C"	$3,191,588.87
Interest on Deposits, and Interest and Dividends on Other Securities, and results of Separately Operated Properties	5,648,600.03
Net Earnings Ocean and Coastal Steamship Lines	487,516.45
Net Earnings Commercial Telegraph and News Departments, Hotels, Rentals and Miscellaneous	1,624,258.39
	$10,951,963.74

Earnings and Expenses

The working expenses for the year, including all taxes, amounted to 81.96 per cent. of the gross earnings, and the net earnings to 18.04 per cent., as compared with 78.81 per cent. and 21.19 per cent. respectively in 1930. Excluding taxes, the ratio of working expenses to gross earnings was 79.17 per cent. and in 1930 76.50 per cent.

The gross earnings from railway operations for the year were less by $40,224,151, freight earnings decreasing $24,427,239, passenger earnings $8,428,121 and miscellaneous earnings $7,368,791.

Working expenses were decreased by $27,219,350, resulting in net earnings of $25,682,872, or a decrease from the previous year of $13,004,801.

For the purpose of the above comparisons the figures of 1930 have been re-stated to include the operations of the subsidiary lines taken into the Company's railway accounts during 1931.

The reduction in gross earnings is accounted for by decreased movements in all branches of traffic. No enterprises have been hit harder by the world-wide depression than the Railway and Express Companies of Canada and the United States.

Your subsidiary, the Canadian Pacific Express Company, was not able to pay in full the revenues guaranteed to your Company under the terms of its contract for express privileges. In consequence, the amount by which the payments made to your Company during the year fell short of that guaranteed has been deducted from the earnings as reported periodically throughout the year. A new contract has been concluded since the close of the fiscal year whereby your Company receives the total net earnings of the Express Company derived from its operations on the railway.

Prior to 1930, it was the Company's practice when equipment was retired to charge to expenses the current cost of the new unit without regard to any increase of capacity over that of the unit retired. Beginning with that year, this practice was changed and the cost of the worn-out or destroyed unit has been retired from investment and charged to expenses. Due to the substantial decrease in the volume of traffic during the past two years, every effort was made to secure maximum use of the larger and more economical locomotives and cars. Maintenance and transportation expenses were benefited thereby. The lesser use made of the older equipment of smaller capacity had the effect of reducing the number of such units retired during 1931, thereby reducing the expenses for the year.

During the year the Company continued to aid the unemployment situation by anticipating renewals. The expense in connection therewith will be charged into the Company's income accounts at the time the work would ordinarily have been performed.

Separately Operated Railways

For many years accounts in connection with certain subsidiary railway companies whose lines are leased to your Company and whose earnings might, therefore, have been merged with the railway earnings of your Company, have been kept separate. It has been decided to change this practice. Effective January 1, 1931, the operations of the Kettle Valley Railway Company were consolidated with those of your Company, and at July 1, 1931, the operations of the Algoma Eastern Railway, The Fredericton & Grand Lake Coal and Railway and the New Brunswick Coal and Railway were also included. Commencing January 1, 1932, the operating accounts of all other subsidiary steam railway companies whose lines are leased to your Company will be incorporated with the railway operating accounts of your Company. The operating results of the electric lines—the Grand River Railway and the Lake Erie & Northern Railway—will be carried into Special Income.

The Esquimalt and Nanaimo Railway Company over a period of years accumulated surplus earnings of $1,040,167, which sum was credited to Special Income in 1930. Operating deficits of other separately operated railways for 1930, amounting to $698,880, were debited to Special Income, leaving a net credit to Special Income from these sources in 1930 of $341,287. The amounts debited in that year included $513,952, representing this Company's one-half share of the deficit on Northern Alberta Railways, in which your Company is equally interested with Canadian National Railways.

The Kettle Valley Railway Company at the date of the consolidation of its operations with those of your Company had accumulated surplus earnings amounting to $1,823,010, which has been credited to Special Income in 1931. An excess of deficits over surpluses from other separately operated railway companies for 1931, amounting to $869,845, has been debited to Special Income, leaving a net credit from these sources in the Special Income of 1931 of $953,165. The deficits referred to include $571,177, representing one-half the deficit for 1931 on Northern Alberta Railways.

Economies

The drastic reduction of $27,219,350 in the working expenses for the year, following upon a reduction of $23,934,266 effected in 1930 (a total reduction from 1929 of $51,153,616), indicates the efforts of the management to offset so far as possible the acute decrease in gross earnings.

Subject to the obligation of providing the public with adequate service, and to the duty of maintaining the property in sound operating condition, no opportunity of curtailing outlay has been neglected. Passenger train service has been reduced to the extent of 3,258,609 train miles per annum, and the trains continued have been operated with fewer coaches. Five operating divisions have been eliminated by consolidating offices and staffs and a number of stations have been closed. The number of locomotives in service has been reduced with a saving in terminal and other expenses through the extension of locomotive runs in various districts. The lessened service required of equipment has enabled it to be maintained with less repair work, and the main shops were closed at intervals during the year. The restriction of activity in all branches of operations has in turn affected the purchases of material, the total expenditures for stores and supplies of all kinds showing a reduction from 1930 of over 42 per cent.

Early in the year your Directors determined upon a ten per cent. reduction in the salaries and wages of all officers and employees. At the date of this report the reduction has been applied to the majority of the payrolls, and steps have been taken to apply it to the remainder at an early date.

On the basis of payroll figures for the year 1931 it is estimated that the reductions in compensation made, and to be made, represent approximately $9,000,000 per annum.

Your Directors cannot conclude this portion of the report without paying unstinted praise to the spirit and loyalty of the officers and men of the Company during an exceedingly trying year. Efficient service by all employees of every rank is rendered as a matter of course, but the past year has given impressive evidence of the devotion of the officers and men to the Company's interests. Your Directors desire to express their sincere and grateful appreciation.

Dividends

It will be observed that the payment for the full year of a dividend of five per cent. on the Ordinary Capital Stock, has necessitated encroachment on the Company's surplus reserve, the earnings within the year not having been sufficient to provide the amount required for this purpose.

It has been the practice of the Company for many years to pay dividends on its Ordinary Capital Stock in New York funds, but, in view of the cost of providing such funds at the present rate of exchange, the quarterly dividend payable on April 1, 1932, has been declared payable in Canadian funds.

In view of the difficulty under present conditions of making a reliable forecast of the results of the Company's operations in the immediate future, your Directors have deemed it wise to revert to the practice of considering dividends on its Ordinary Capital Stock half-yearly instead of quarterly. The question of dividend on the Ordinary Stock will, therefore, not be considered by the Board until its August meeting, at which time the actual earnings for the first half of 1932 will be known, and an estimate can safely be made of the Canadian grain crop.

Land Sales

The sales of agricultural lands for the year were 87,687 acres for $1,254,100.95, being an average of $14.30 per acre. Included in this area were 7,798 acres of irrigated land which brought $42.25 per acre, so that the average for the balance was $11.57 per acre.

Concessions to Land Contract Holders

Your Directors having decided that the economic conditions presently prevailing among the Company's land contract holders warrant, if they do not imperatively require, the writing off of some measure of their obligations in order to keep them on the land and to induce fulfilment of their contracts, have authorized the extension of relief to all purchasers from the Company under existing land contracts in accordance with the following conditions:

1. The Company voluntarily to remit one year's interest on the total amount owing under the terms of the land contract (excluding taxes paid, if any).
2. The Company to remit a second full year's interest provided:
   (a) The purchaser has first paid the equivalent of one year's taxes.
   (b) The purchaser delivers to the Company a one-third share of crop under crop agreement acceptable to the Company; or pays in cash the equivalent of one full annual instalment under the land contract.
3. The Company to give an additional credit on arrears of interest of one dollar for each dollar paid in cash or by delivery of crop, this credit to extend only to extinguishing arrears of interest.
4. These provisions to apply to all payments made by contract holders either in cash or by delivery of crop, between January 1 and December 31, 1932.

Issuance of Securities

During the year the Company issued £1,625,000 Four Per Cent. Preference Stock. In view of the unsettled financial conditions existing during the later months of last year your Directors considered it undesirable to make any further issue of the Company's securities at that time, and arrangements were made to provide funds necessary for the Company's undertakings by issuing Short Term Notes to the extent of $25,000,000 at favourable rates of interest.

Hotels

The operation of the Company's hotels resulted in a decrease in earnings of $372,337 under those of the previous year due principally to the falling off in both commercial and tourist business which was general over the North American continent; indeed, at no time since your Company established hotels as auxiliary to its railway and to stimulate tourist and convention travel, has the hotel business been at such a low ebb. The net earnings of the Royal York Hotel were, however, well maintained, amounting to $477,091, or only $18,245 less than 1930.

Your Directors have given consideration to the advisability of closing the Place Viger Hotel in Montreal, erected in 1897 and enlarged and modernized in 1912. Its revenues have been unsatisfactory for some years mainly in consequence of the erection of large and modern hotels in the centre of the city. A final decision as to the action to be taken will not be made until the autumn, so that the benefit of the summer traffic will not be lost.

The operations of the Lord Nelson Hotel at Halifax, in which your Company has a substantial stock interest, have been affected by the general subnormal commercial conditions and the existence of surplus hotel accommodation in that city, provided since the Lord Nelson Hotel was built. An agreement has been entered into with the bondholders of the Lord Nelson Hotel whereby the interest on the bonds has been guaranteed by your Company in consideration of the bondholders reducing the interest from 6½% to 4% and postponing the sinking fund instalments to November 1, 1933.

Canadian Pacific Steamships, Limited

The operating results of your combined Atlantic and Pacific fleets for the year have been satisfactory, considering traffic conditions, the Company having in the year received its full share of the business offering.

Due to the reduction in tonnage requirements in consequence of the existing depression, three of the older vessels of the fleet, namely, the "Bolingbroke," the "Bothwell" and the "Metagama," were laid up for the entire season and other ships were withdrawn for temporary periods.

Your Directors are glad to report that the operations of the "Empress of Britain," the newest and largest vessel in your Atlantic service, have been satisfactory, having shown an operating profit on voyages during the regular Atlantic season of $396,158. This vessel is now on a World's Cruise, with estimated gross revenues of $1,300,000.

No serious casualties to the vessels of your fleet took place in 1931.

After providing for the distribution of part of the surplus earnings of the Allan Line Steamship Company, to which reference was made in the last Annual Report, there remained to the credit of the Allan Line Deposit Account in Reserve Fund for Contingencies a balance of $8,363,599, which has now been transferred to Steamship Replacement Reserve. As a result of this transfer fully adequate provision has been made for replacement and no further provision has been made from the year's income account.

Canadian Australasian Line

To promote its interest in traffic between Canada and Australia and New Zealand, your Company during the year acquired a half interest in the motorship "Aorangi" and the steamship "Niagara," theretofore operated by the Union Steamship Company of New Zealand between Vancouver, Auckland and Sydney. The price agreed upon was £500,000, which, by arrangement with the Union Steamship Company, was paid by the delivery of Canadian Pacific Preference Stock to the amount of £625,000 at an agreed price of 80.

For the purpose of carrying out the transaction, the Canadian Australasian Line, Limited, was incorporated in Canada, to which the vessels were transferred by the Union Steamship Company in consideration of the issue of 48,666 shares of the par value of $100 each, one-half of which were then purchased by your Company in the manner described.

The principal office of the new company is at Vancouver, and its directorate is composed of nominees of the two companies in equal numbers.

Agreements

Your confirmation and approval will be asked of the following agreements made by your Directors during the past year:

1. Agreement dated as of January 1, 1927, between His Majesty the King in right of the Dominion of Canada, of the one part, and your Company, of the other part, whereby your Company has been granted the joint use and enjoyment of the passenger station and passenger facilities of the Crown at Saint John, New Brunswick, on the basis of paying one-half the interest charge on capital account and a wheelage proportion of maintenance and operation expenses.

2. Agreement dated October 21, 1931, between your Company, of the first part, Canadian Pacific Steamships, Limited,

CANADIAN PACIFIC RAILWAY COMPANY

GENERAL BALANCE SHEET, DECEMBER 31, 1931

ASSETS

PROPERTY INVESTMENT:			
Railway, Rolling Stock Equipment, Lake and River Steamers and Hotels		$868,448,442.64	
Ocean and Coastal Steamships, Exhibit "A"		116,397,891.30	
Acquired Securities (Cost): Exhibit "B"		177,154,694.80	
			$1,162,001,028.74
ADVANCES TO CONTROLLED PROPERTIES			9,458,713.74
INVESTMENTS AND AVAILABLE RESOURCES:			
Deferred Payments on Lands and Townsites		$52,877,075.10	
Provincial and Municipal Securities		792,721.29	
Miscellaneous Investments, Exhibit "C", Cost		32,398,329.24	
Assets in Lands and Properties, Exhibit "D"		59,216,053.35	
			145,284,178.98
INSURANCE PREMIUMS PAID IN ADVANCE			264,832.21
WORKING ASSETS:			
Material and Supplies on Hand		$21,482,561.67	
Agents, and Conductors' Balances		4,746,078.02	
Net Traffic Balances		382,373.72	
Imperial, Dominion and United States Governments, Accounts due for Transportation, etc.		2,795,675.53	
Miscellaneous Accounts Receivable		10,496,432.03	
Cash in Hand	$21,876,713.69		
Dominion Government Bonds	2,100,000.00		
		23,976,713.69	
			63,879,834.66
			$1,380,888,588.33

LIABILITIES

CAPITAL STOCK:			
Ordinary Stock		$335,000,000.00	
Four Per Cent Preference Stock		137,256,921.12	
			$472,256,921.12
FOUR PER CENT CONSOLIDATED DEBENTURE STOCK	$398,911,548.74		
LESS: Collateral as below*	107,500,000.00		
			291,411,548.74
TEN YEAR 5% COLLATERAL TRUST GOLD BONDS (1934)*			12,000,000.00
TWENTY YEAR 4½% COLLATERAL TRUST GOLD BONDS (1946)*			20,000,000.00
TWENTY-FIVE YEAR 5% COLLATERAL TRUST GOLD BONDS (1954)*			30,000,000.00
THIRTY YEAR 4½% COLLATERAL TRUST GOLD BONDS (1960)*			25,000,000.00
TWENTY YEAR 4½% SINKING FUND SECURED NOTE CERTIFICATES (1944)	$30,000,000.00		
LESS: Purchased by Trustee and cancelled	8,100,600.00		
	21,899,400.00		
LESS: Amount held by Trustee	10.63		
			21,899,389.37
MORTGAGE BONDS:			
Algoma Branch 1st Mortgage 5 per cent			3,650,000.00
Lacombe & Blindman Valley Railway 1st Mortgage 5 per cent			273,700.00
SHORT TERM NOTES			25,000,000.00
EQUIPMENT OBLIGATIONS	$50,300,000.00		
LESS: Securities on hand with Trustee	4,160,000.00		
			46,140,000.00
CURRENT:			
Audited Vouchers		3,828,064.62	
Pay Rolls		3,128,423.77	
Miscellaneous Accounts Payable		5,893,762.59	
			12,850,250.98
ACCRUED:			
Rentals of Leased Lines and Coupons on Mortgage Bonds			1,240,617.72
RESERVES AND APPROPRIATIONS:			
Equipment Replacement		8,419,677.75	
Steamship Replacement		26,966,439.73	
Reserve Fund for Contingencies and for Contingent Taxes		4,553,471.01	
Special Reserve to meet Taxes imposed by Dominion Government		1,050,120.99	
			40,989,709.48
PREMIUM ON CAPITAL STOCK SOLD (LESS DISCOUNT ON BONDS AND NOTES)			67,276,694.80
NET PROCEEDS LANDS AND TOWNSITES			72,061,226.36
SURPLUS REVENUE FROM OPERATION			127,579,894.45
SURPLUS IN OTHER ASSETS			111,258,635.31
			$1,380,888,588.33

E. E. LLOYD, Comptroller.

AUDITORS' CERTIFICATE.

We have examined the Books and Records of the Canadian Pacific Railway Company for the year ending December 31, 1931, and having compared the above Balance Sheet therewith, we certify that, in our opinion it is properly drawn up so as to show the true financial position of the Company at that date, and that the statement of Income contained in the Directors' Report is correct.

PRICE, WATERHOUSE & CO.,
Chartered Accountants, (England).

Montreal, March 11, 1932

of the second part, and Canadian National Railway Company, of the third part, providing for co-operation on the part of the Canadian National Railway Company with your Company and the Steamship Company in the solicitation, booking and carriage of freight, passenger and express traffic on the ships of your Company to and from Canadian Atlantic ports.

Branch Lines

Construction work was proceeded with on branch lines in Western Canada already authorized by the shareholders; 162.9 miles being graded, 300.8 miles of track laid, and 67.2 miles ballasted on these lines. The greater portion of this mileage was built in accordance with the terms of the agreement with the Government of Canada, to which reference was made in the last Annual Report.

At the close of 1931 we were within sight of the end of a construction programme begun in 1919. Your Directors are not recommending for approval any new construction during the present year, the only work to be done being to complete lines already partially built. It is not anticipated that any projects of major proportions will require to be undertaken in the near future.

The branch line construction has, to a large extent, been in the more northerly portions of Saskatchewan and Alberta, where the most active development may be expected. These districts, which are more or less wooded, come more slowly into tonnage production than lands to the South, but when cleared are very productive and not subject to periods of drought. In carrying your lines into this territory, your Directors are of the opinion that they have strengthened and stabilized the future earning power of the system. The results obtained so far have been encouraging; the territory served is being brought under cultivation rapidly, and the yield of grain products per acre has been of satisfactory volume.

Minneapolis, St. Paul & Sault Ste. Marie Railway Company

The crop failure of 1931 in the territory served by your subsidiary, the Soo Line, and the severe business depression, resulted in a very poor year for that property. Its losses in traffic were due in particular to a greatly decreased movement of commodities that formerly contributed its heaviest tonnage and largest revenues, such as grain and grain products, lumber and forest products, coal and iron ore.

The territory served by the Soo Line, save the extreme western portion, has enjoyed this year more moisture and a large amount of fall plowing was completed, so that the whole territory is in excellent condition for early seeding.

The increased production of livestock and livestock products from the Soo territory has been very beneficial notwithstanding the lower prices received. Increased diversification has greatly helped the farmer and the business man.

The management has put into effect many permanent economies, the property is well maintained and its officers feel confident that the present year will show better results than in 1931.

During the past year the Company issued, for its capital requirements, $12,500,000 5½, First Refunding Mortgage Bonds to mature July 1, 1978, upon which your Company guaranteed the interest. This guarantee enabled the Company to market the bonds to better advantage and so protect your Company's interest in the property.

The Company being unable to fully provide for the half-yearly interest due January 1, 1932, on its First Consolidated Mortgage Bonds, it became necessary for your Company under its guarantee of such interest to advance an amount of $1,400,000, which amount was obtained by loan of $900,000 from the National City Bank of New York, and $500,000 from the First National Bank, Chicago, on this Company's short term promissory notes.

It is to be remembered that your Company's interest in the Minneapolis, St. Paul and Sault Ste. Marie Railway Company has been a valuable asset, and with the return of normal conditions repayment of any advances made to it may be confidently expected.

Duluth, South Shore & Atlantic Railway Company

During the year a new ore dock has been constructed at Marquette, Mich., by the South Shore Dock Company, a subsidiary of the Duluth, South Shore & Atlantic Railway Company, to which the dock has been leased at a rental equal to the amount required to meet the principal and interest of $1,000,000 5% First Mortgage Bonds of the Dock Company as they mature serially over a period of fifteen years. The total cost of the dock was approximately $1,350,000, and to assist in financing it your Company temporarily advanced to the Duluth, South

Shore & Atlantic Company $350,000, and also guaranteed the payment of the rental.

Dominion Agricultural Credit Company, Limited

Your Directors authorized a subscription by the Company of $500,000 to the capital of the Dominion Agricultural Credit Company, Limited, organized under Dominion Charter with a view to the promotion of diversification of farming in the Prairie Provinces. Ten per cent. of the subscription has been called and paid.

Capital Expenditures

In anticipation of your confirmation your Directors authorized capital appropriations, in addition to those approved at the last Annual Meeting, aggregating for the year 1931, $4,760,833, and ask your approval of expenditures on capital account during the present year of $4,047,921. Of this amount the principal items are:—

Replacement and enlargement of structures in permanent form	$ 148,327
Additional stations, round houses, freight sheds and shops, and extensions to existing buildings	4,306
Tie plates, rail anchors, ballasting, ditching and miscellaneous roadway betterments	2,725,829
Replacement of rail in main and branch line tracks with heavier section	482,982
Installation of automatic signals	42,906
Additional terminal and side track accommodation	43,299
Improving coaling and watering facilities	16,270
Mechanical Department, machinery at various points	27,848
Improvements in connection with telegraph service	363,312
British Columbia Coast Steamships	22,925

The balance of the amount is required for miscellaneous works to improve facilities and effect economies over the whole system.

Consolidated Debenture Stock

Your Company's power to issue Consolidated Debenture Stock is limited by the various Acts of Parliament relating to the Company to specified rates per mile in the case of railways and to cost in the case of steamships. The amount so authorized is considerably less than one-half of the property investment of the Company, the greater part having been supplied by the issue of Ordinary and Preference stock and by surplus earnings.

Having regard to present economic conditions and the probable future capital requirements of the Company, the Company is applying to Parliament at the present session for authority to issue from time to time additional Consolidated Debenture Stock, to an amount which, together with the outstanding consolidated debenture stock, bonds, debentures and other obligations, including equipment obligations, secured by mortgage of or charge upon the undertaking of the Company, shall not exceed one-half of the Company's property investment.

Royal Commission on Transportation

The shareholders of the Company are, no doubt, aware through the public press that the Government of Canada has appointed a Royal Commission to enquire into the whole problem of transportation in Canada, particularly in relation to railways and shipping, and communication facilities therein, having regard to present conditions and the probable future development of the country, and to report their conclusions and make such recommendations as they think proper. The necessity for such an investigation has been generally recognized. The Commission has not yet concluded its labours.

Stock Holdings

The holdings of the Ordinary and Preference Stocks of the Company in December, 1931, were distributed as follows:—

	ORDINARY		PREFERENCE		Percentage of Ordinary and Preference combined
	No. of holders	Percentage of Stock	No. of holders	Percentage of Stock	
Canada	35,378	20.04	55	.46	14.36
United Kingdom and other British	21,773	44.80	26,896	97.12	59.97
United States	15,254	29.03	31	.59	20.78
Other Countries	4,641	6.13	174	1.83	4.8!
Total	77,046		27,156		

Retiring Directors

The undermentioned Directors will retire from office at the approaching Annual Meeting. They are eligible for re-electio

Mr. Grant Hall
Mr. R. S. McLaughlin
Mr. E. R. Peacock
Mr. W. N. Tilley, K.C.

For the Directors,

E. W. BEATTY,
President.

Montreal, March 14, 1932.

Norfolk and Western Railway Company
Thirty-sixth Annual Report

Roanoke, Va., March 28th, 1932.

The Annual Report for the year ended December 31st, 1931, has been approved by the Board of Directors for submission to the stockholders. A synopsis follows:

The operated mileage of the Company was 2,227.22 miles. Including 26.88 miles of subsidiary companies and 13.95 miles operated under trackage rights, the first main track mileage was 2,268.05 miles and the total mileage of all tracks was 4,634.98 miles.

Following is a comparison of 1931 figures with those for 1930:

	1931	1930		Increase or Decrease
Revenue from Freight	$74,293,921.59	$93,168,818.78	Dec.	$18,874,897.19
Revenue from Passengers	2,638,215.92	3,869,012.03	Dec.	1,230,796.11
Revenue from Mail, Express and Miscellaneous	2,922,610.42	3,492,627.25	Dec.	570,016.83
Total Revenue from Operations	$79,854,747.93	$100,530,458.06	Dec.	$20,675,710.13
Maintenance of Roadway and Structures	$9,715,056.25	$11,831,477.31	Dec.	$2,116,421.06
Maintenance of Equipment	15,368,789.62	18,803,899.83	Dec.	3,435,110.21
Transportation—Expense of Operation	20,750,502.29	24,297,149.38	Dec.	3,546,647.09
Other Expenses	4,760,466.28	4,743,198.58	Inc.	17,267.70
Total Operating Expenses	$50,594,814.44	$59,675,725.10	Dec.	$9,080,910.66
Net Revenue from Operations	$29,259,933.49	$40,854,732.96	Dec.	$11,594,799.47

	1931	1930		Increase or Decrease
Ratio of Operating Expenses to Total Operating Revenue	63.36%	59.36%	Inc.	4.00%
Federal, State and Local Taxes	$8,150,000.00	$9,850,000.00	Dec.	$1,700,000.00
Uncollectible Revenue Charges	5,307.97	5,437.32	Dec.	129.35
Net Rental of Equipment and Joint Facilities—Credit	1,872,880.54	2,641,562.91	Dec.	768,682.37
Net Railway Operating Income	$22,977,506.06	$33,640,858.55	Dec.	$10,663,352.49
Other Income—(Mainly Interest on Investments)—Net	2,691,740.56	3,120,477.71	Dec.	428,737.15
Gross Income from all sources	$25,669,246.62	$36,761,336.26	Dec.	$11,092,089.64
Interest Paid on Bonds and Equipment Obligations	$4,509,911.03	$4,944,570.85	Dec.	$434,659.82
Dividends on Adjustment Preferred Stock—$4.00 per share	919,692.00	919,692.00		....
Balance of Income	$20,239,643.59	$30,897,073.41	Dec.	$10,657,429.82
Earned per share on Common Stock outstanding	14.39	21.97	Dec.	7.58
Dividends on Common Stock—$12.00 per share	$16,877,796.00	$16,877,796.00		....
Funded Debt outstanding at end of year	101,401,531.92	111,995,531.92	Dec.	$10,594,000.00

	1931	1930	Increase or Decrease
Capital Stock outstanding at end of year	163,640,600.00	163,640,600.00	....
Investment in Road and Equipment at end of year	461,468,367.11	451,802,338.48	Inc. 9,666,028.63

The investment in property devoted to and used in transportation service was $324,841,861.78, an increase over the previous year of $8,671,948.77.

The Company's equipment, owned and leased, was valued at $136,626,505.33 and consisted of 757 steam locomotives, 16 electric locomotives, 443 passenger train cars, 48,962 freight train cars and 1,999 work and miscellaneous units. New equipment received during the year included above, consisted of 9 steam freight locomotives, 273 steel box cars of 100,000 lbs. capacity each and 758 steel hopper coal cars of 115,000 lbs. capacity each all built in the Company's Shops at Roanoke, Va.

Comparison of traffic and operating revenue figures with those of the preceding year shows the following changes:

Number of passengers	1,192,948	decreased	598,468	33.41 per cent
Average haul of passengers	68.89 miles	increased	3.31 miles	5.05 per cent
Revenue from passenger fares	$2,638,215.92	decreased	$1,230,796.11	31.81 per cent
Average rate per passenger per mile	3.210 cents	decreased	.083 cents	2.52 per cent
Revenue freight carried	39,101,285 tons	decreased	11,525,237 tons	22.77 per cent
Average haul of freight	277.83 miles	increased	1.61 miles	.58 per cent
Revenue from freight tansportation	$74,293,921.59	decreased	$18,874,897.19	20.26 per cent
Average rate per ton per mile	.684 cents	increased	.018 cents	2.70 per cent
Average tons of revenue freight per train mile	1,401.78	decreased	108.39 tons	7.18 per cent
Shipments of coal	31,109,505 tons	decreased	8,743,052 tons	21.94 per cent
Shipments of coke	290,385 tons	decreased	153,782 tons	34.62 per cent
Shipments of ore	249,948 tons	decreased	184,363 tons	42.45 per cent
Shipments of pig and bloom iron	42,667 tons	decreased	29,407 tons	40.80 per cent
Shipments of lumber	712,611 tons	decreased	171,472 tons	19.40 per cent

The results of operation during 1931 reflect the general condition of business during the year, more specifically the reduced demand for bituminous coal, the principal commodity of traffic.

Gross Operating Revenues for 1931 were $79,854,747.93, a decrease of $20,675,710.13, or 20.57 per cent. Operating Expenses were $50,594,814.44, a decrease of $9,080,910.66, or 15.22 per cent. The property has been maintained to the Company's usual standards, the reduction in maintenance charges being largely due to the decreased use of the property.

Net Revenues from Operations were $29,259,933.49, a decrease of $11,594,799.47, or 28.38 per cent. Net Income, after paying the regular 4 per cent. dividend of $919,692.00 upon the Adjustment Preferred Stock, was $20,239,643.59, equivalent to $14.39 per share earned on the Common Stock, a reduction, as compared with 1930, of $10,657,429.82, or $7.58 a share. Quarterly dividends of $2.50 per share, a total of $10.00 per share, and an extra dividend of $2.00 per share were paid on the Common Stock.

There was no change in the outstanding Capital Stock, which represented 61.74 per cent. of total outstanding capitalization.

Funded Debt was reduced $10,594,000, principally through payment at maturity of $7,235,000 Norfolk and Western Railroad Company General Mortgage 6 per cent. bonds and $3,270,000 Equipment Trust 4½ per cent. certificates. Funded Debt represented 38.26 per cent. of total outstanding capitalization.

Taxes amounted to $8,150,000, a decrease of $1,700,000, or 17.26 per cent., under 1930. United States Government taxes decreased $1,460,000, due to reduction in earnings, and State, County and Municipal taxes decreased $240,000, due to lower levies or assessments.

The more important additions and betterments were the laying of an additional 107.82 miles of track with 130 lb. rail and the addition of 238,280 cubic yards of standard ballasting, almost entirely stone, in main line tracks. At Roanoke, Va., the new modern eight-story office building was completed and occupied in May, 1931, and in November, 1931, the Virginia Holding Corporation, a subsidiary of the Company, completed a modern 69 room addition, with garage facilities, to Hotel Roanoke. At Portsmouth, Ohio, a new three-story passenger station and division office building was completed and occupied in July, 1931. Numerous other additions and betterments, including improvement in stations and bridges, elimination of grade crossings and additions to facilities at sundry places along the Company's line, were completed.

Grading for extension of Jacobs Fork Branch in McDowell County, W. Va., and Tazewell County, Va., was completed and 6.35 miles of track were laid and placed in operation in April, 1931.

The operation of the Big Sandy and Cumberland Railroad was assumed by the Company on July 1st, 1931, upon completion of construction at a cost of $8,400,700.92.

Construction on the Guyandot and Tug River Railroad from a connection with this Company's line at Wharncliffe, W. Va., to Gilbert, W. Va., 10.5 miles, continued. On November 1st, 1931, all grading, masonry and tunnel work was completed, with exception of the yard near Gilbert, W. Va., to be built jointly with the Virginian Railway Company. Track has been laid and 5.5 miles ballasted. Further construction has been deferred until approximately July 1st, 1933. This railroad, a subsidiary of the Company, is being constructed to provide access to markets in the West for coal traffic originating on the Guyandot line and on the Virginian Railway.

Fifty-six new industries located on the Company's line, manufacturing food, textile, lumber, chemical, petroleum, coal, machinery and miscellaneous products, with a total capitalization of $3,085,500 and employing 1,283 persons. Fifty-six additions to established plants were completed, costing $2,391,800 and employing 2,138 persons. One new coal mine was placed in operation. At the close of the year there were 162 companies organized for producing coal and coke on this Company's line, with a total of 229 mines, of which 159 mines were in actual operation.

On February 13th, 1931, the Interstate Commerce Commission issued a Recapture Report against the Company, based upon the Commission's valuation of the Company's property, ascertaining recapturable Net Railway Operating Income at $31,698,689.00 for the three years 1924, 1925 and 1926, one-half of which, $15,849,344.51, was ordered to be paid to the Commission. The Company takes the position that no recapture is due for the years in question and Protest as to valuation and recapture fixed by the Commission has been filed. Hearings commenced February 15, 1932.

At the close of the year the Relief Fund had 19,367 members, equivalent to 91.47 per cent. of the total number of em-

Condensed General Balance Sheet, December 31, 1931

ASSETS:			
Investments			$515,888,776.58
Investment in Road		$324,841,861.78	
Investment in Equipment Owned		97,106,339.61	
Investment in Equipment in Trust		39,520,165.72	
Sinking Funds and Deposits account Property sold		1,062,698.98	
Miscellaneous Physical Property		6,205,956.95	
Investment in Affiliated Companies		11,646,301.03	
Other Investments		35,505,452.51	
Current Assets			12,155,776.71
Cash		3,691,710.96	
Material and Supplies		5,283,809.45	
Other Current Assets		3,180,256.30	
Deferred Assets			14,140,218.61
Norfolk and Western Railway Company-Pocahontas Coal & Coke Company Joint Purchase Money Mortgage Bonds, Securities held for Relief Fund, etc.			
Unadjusted Debits			4,173,028.73
Total			$546,357,800.63
LIABILITIES:			
Capital Stock			$163,640,600.00
Adjustment Preferred		$22,992,300.00	
Common		140,648,300.00	
Long Term Debt			101,401,531.92
Mortgage Bonds		$87,806,500.00	
Convertible Bonds		439,000.00	
Equipment Obligations		7,070,000.00	
Miscellaneous		6,086,031.92	
Current Liabilities			4,110,742.32
Traffic and Car Service Balances, Accounts and Wages Payable, Interest and Dividends Matured and Unpaid, Unmatured Dividends Declared and Other Current Liabilities.			
Deferred and Joint Liabilities			14,083,821.04
Norfolk and Western Railway Company-Pocahontas Coal & Coke Company Joint Purchase Money Mortgage Bonds, Securities purchased for Relief Fund, etc.			
Unadjusted Credits			58,861,334.90
Accrued Depreciation—Road, Equipment and Miscellaneous Physical Property		$51,073,936.29	
Tax Liability, Insurance Reserves and Other Unadjusted Credits		7,787,398.61	
Sinking Fund Reserves			467,604.43
Corporate Surplus			203,792,166.02
Additions to Property through Income and Surplus		$44,699,710.43	
Road	$21,394,384.16		
Equipment	23,305,326.27		
Funded Debt Retired through Income and Surplus		7,235,000.00	
Profit and Loss Balance		151,857,455.59	
Total			$546,357,800.63

[ADVERTISEMENT]

ployes, a decrease in the year of 1,310 members and an increase of 7.89 per cent. in ratio of members to employes.

At the close of the year there were 797 employes on the Pension Roll, a net increase of 41 in the year, with an average pension of $676.92 per annum, compared with an average pension of $649.32 per annum at the close of 1930. In December, 1931, $695,381.82 was appropriated from Surplus and paid to the Trustees of the Pension Reserve Fund. The appropriations to date for retired employes total $5,256,114.05. In 1931 the Fund was credited with interest and amortization aggregating $151,983.52 and was charged with $518,447.64 paid to the Railway Company in reimbursement for pensions paid. At the close of the year the Trustees held securities of a face value of $3,404,000, costing $3,219,807.88, and $177,351.25 in cash.

By order of the Board of Directors. A. C. NEEDLES, *President.*

[ADVERTISEMENT]

Meetings & Conventions

(Continued from page 580)

Equipment Painting Section.—V. R Hawthorne, 59 East Van Buren St., Chicago.
Division VI.—Purchases and Stores. W. J. Farrell, 30 Vesey St., New York, N. Y.
Division VII.—Freight Claims.—Lewis Pilcher, 59 East Van Buren St., Chicago. Annual meeting, June 7-9, 1932, Sherman House, Chicago.
Division VIII.—Motor Transport.—George M. Campbell, 30 Vesey St., New York.
Car Service Division.—C. A. Buch, 17th and H. Sts., N. W., Washington, D. C.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—C. A. Lichty, C. & N. W. Ry., 319 N. Waller Ave., Chicago. Next convention, October 18-20, 1932, Royal York Hotel, Toronto, Ont. Exhibit by Bridge and Building Supply Men' Association.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—A. W. Large, Gen. Agri. Agt., C. R. I. & P. Ry., Chicago, Ill. Annual meeting, June 15-17, 1932, Brown Hotel, Louisville, Ky.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in co-operation with the American Railway Association, Division IV.—E. H. Fritch, 59 East Van Buren St., Chicago.

AMERICAN RAILWAY MAGAZINE EDITORS ASSOCIATION.—Miss E. Kramer, M-K-T Employees Magazine, St. Louis, Mo. Next convention, April 21-22, 1932, Plaza Hotel, San Antonio, Tex.

AMERICAN RAILWAY TOOL FOREMEN'S ASSOCIATION.—G. G. Macina, C., M., St. P. & P. R. R., 11402 Calumet Ave., Chicago. Exhibit by Supply Association of the American Railway Tool Foremen's Association.—E. E. Caswell, Union Twist Drill Co., 11 S. Clinton St., Chicago.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—R. E. Schindler, Union Trust Bldg., Washington, D. C.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—Calvin W. Rice, 29 W. 39th St., New York. Railroad Division, Paul D. Mallay, Johns-Manville Corp., 292 Madison Ave., New York.

AMERICAN WOOD PRESERVERS' ASSOCIATION.—H. L. Dawson, 1104 Chandler Building, Washington, D. C. Next convention, January 24-26, 1933, Chicago, Ill.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—H. D. Morris, District Claim Agent, Northern Pacific Ry., St. Paul, Minn., Annual convention, May 18-20, 1932, Louisville, Ky.

ASSOCIATION OF RAILWAY ELECTRICAL ENGINEERS.—Jos. A. Andreucetti, C. & N. W., Room 411, C. & N. W. Station, Chicago. Exhibit by Railway Electrical Supply Manufacturers' Association.

ASSOCIATION OF RAILWAY EXECUTIVES.—Stanley J. Strong, Transportation Building, Washington, D. C.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—S. A. Baber, High Grade Manufacturing Co., 10418 St. Clair Ave., Cleveland, Ohio. Meets with American Railway Bridge and Building Association.

CANADIAN RAILWAY CLUB.—C. R. Crook, 2276 Wilson Ave., N. D. G., Montreal, Que. Regular Meetings, 2nd Monday in each month, except June, July, and August, Windsor Hotel, Montreal, Que.

CAR DEPARTMENT OFFICERS ASSOCIATION.—A. S. Sternberg, M. C. B. Belt Ry. of Chicago, 7926 South Morgan Street, Chicago.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—G. K. Oliver, 2514 W. 55th St., Chicago. Regular meetings, 2nd Monday in month, except June, July, and August, Auditorium Hotel, Chicago.

CAR FOREMEN'S ASSOCIATION OF LOS ANGELES.—J. W. Krause, Room 299, 610 So. Main St., Los Angeles, Cal. Regular meetings, 2nd Monday of each month, except July, August and September, Room 299, 610 So. Main St., Los Angeles. Club not active at present time.

CAR FOREMEN'S ASSOCIATION OF ST. LOUIS, MO.—J. F. Brady, Main and Barton St., St. Louis, Mo. Meetings first Tuesday of each month, except July and August, American Hotel Annex, 6th and Market Sts., St. Louis, Mo.

CENTRAL RAILWAY CLUB OF BUFFALO.—T. J. O'Donnell, 1817 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, 2nd Thursday each month, except June, July, August, Hotel Statler, Buffalo, N. Y.

CINCINNATI RAILWAY CLUB.—D. R. Boyd, 2920 Utopia Place, Hyde Park, Cincinnati, Ohio. Meetings 2nd Tuesday in February, May, September and November, Hotel Gibson, Cincinnati, O.

CLEVELAND RAILWAY CLUB.—F. L. Frericks, 14416 Alder Ave., Cleveland, Ohio. Meetings second Monday each month, except June, July, August, Auditorium, Brotherhood of Railroad Trainmen's Building, West 9th St., and Superior Ave., Cleveland.

INTERNATIONAL RAILROAD MASTER BLACKSMITHS' ASSOCIATION.—W. J. Mayer, Michigan Central R. R., Detroit, Mich.

INTERNATIONAL RAILWAY CONGRESS.—January 10-16, 1933. Cairo, Egypt.

INTERNATIONAL RAILWAY FUEL ASSOCIATION.—C T. Winkless, Room 700, La Salle Street Station, Chicago.

INTERNATIONAL RAILWAY GENERAL FOREMEN'S ASSOCIATION.—Wm. Hall, 1061 W. Wabasha St., Winona, Minn.

MASTER BOILER MAKERS ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany, N. Y.

MASTER CAR BUILDERS' AND SUPERVISORS' ASSOCIATION.—(See Car Department Officers' Association.)

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—James B. Walker, 270 Madison Ave., New York. Annual convention, November 15-18, 1932, Hot Springs, Ark.

NATIONAL ASSOCIATION OF RAILROAD TIE PRODUCERS.—Roy M. Edmonds, 1252 Syndicate Trust Bldg., St. Louis, Mo. Next convention, May 17-18, 1932, Hotel Peabody, Memphis, Tenn.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—C. W. Kelly, 1014 South Michigan Ave., Chicago.

NATIONAL SAFETY COUNCIL.—Steam Railroad Section; J. L. Walsh, (Honorary vice-chairman), Supt. Safety, M.-K.-T. R. R., Dallas, Tex. Next annual meeting, October, 1932, Washington, D. C.

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, 2nd Tuesday in month, except June, July, August and September, Copley Plaza Hotel, Boston, Mass.

NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York. Regular meetings 3rd Friday in month, except June, July and August, 29 W. 39th St., New York City.

PACIFIC RAILWAY CLUB.—W. S. Wollner, P. O. Box, 3275, San Francisco, Cal. Regular meetings 2nd Thursday in month, alternately in San Francisco and Oakland.

RAILWAY ACCOUNTING OFFICERS' ASSOCIATION.—E. R. Woodson, Transportation Building, Washington, D. C. Next convention, August, 1932, Buffalo, N. Y.

RAILWAY BUSINESS ASSOCIATION.—Frank W. Noxon, 1112 Shoreham Building, Washington, D. C.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 1841 Oliver Building, Pittsburgh, Pa. Regular meetings, 4th Thursday in each month except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRICAL SUPPLY MANUFACTURERS ASSOCIATION.—Edward Wray, 9 S. Clinton St., Chicago. Meets with Association of Railway Electrical Engineers.

RAILWAY FIRE PROTECTION ASSOCIATION.—R. R. Hackett, Baltimore & Ohio R. R., Baltimore, Md.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—J. D. Conway, 1841 Oliver Bldg., Pittsburgh, Pa. Meets with Mechanical Division, Purchases and Stores Division and Motor Transport Division, American Railway Association. No exhibit at 1932 convention.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, 30 Church St., New York. Meets with Telegraph and Telephone Section of A. R. A. Division I.

RAILWAY TREASURY OFFICERS' ASSOCIATION.—L. W. Cox, 1217 Commercial Trust Bldg., Philadelphia, Pa.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION. — T. F. Donahoe, Gen. Supvr. Road, Baltimore & Ohio, Pittsburgh, Pa. Next convention, September 20-22, 1932. Hotel Stevens, Chicago. Exhibit by Track Supply Association.

ST. LOUIS RAILWAY CLUB.—B. W. Frauenthal, Drawer 24, M. P. O., St. Louis, Mo. Regular meetings, 2nd Friday in month, except June, July and August. Statler Hotel, St. Louis.

SIGNAL APPLIANCE ASSOCIATION.—F. W. Edmunds, West Nyack (Rockland Co.), N. Y. Meets with A. R. A. Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S.E., Atlanta, Ga. Regular meetings, 3rd Thursday in January, March, May, July, September and November. Ansley Hotel, Atlanta.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—R. G. Parks, A. B. & C. Ry., Atlanta, Ga.

SUPPLY MEN'S ASSOCIATION.—E. H. Hancock, Treasurer, Louisville, Varnish Co., Louisville, Ky. Meets with A. R. A. Div. V. Equipment Painting Section.

TORONTO RAILWAY CLUB.—J. A. Murphy, P. O. Box 8, Terminal "A," Toronto. Regular meetings 1st Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—L. C. Ryan, Oxweld Railroad Service Co., Carbon & Carbide Building, Chicago. Meets with Roadmasters and Maintenance of Way Association.

TRAVELING ENGINEERS' ASSOCIATION.—W. O. Thompson, 1177 East 98th St., Cleveland, O.

WESTERN RAILWAY CLUB.—J. H. Nash, Dri-Steam Valve Sales Corp., 122 S. Michigan Ave., Chicago. Regular meetings 3rd Monday in each month, except June, July, August and September, Hotel Sherman, Chicago.

Equipment and Supplies

FREIGHT CARS

THE PACIFIC FRUIT EXPRESS is inquiring for 100 steel underframes for refrigerator cars. These are for the 100 new cars to be built in the company's shops, as reported in the *Railway Age* of March 12.

IRON & STEEL

THE BOARD OF TRANSPORTATION, NEW YORK CITY, will receive bids on April 12 for 4,097½ tons of open-hearth contact rail to include 3,500 tons of 150 lb. rail, 185 tons of 100-lb. rail and 412½ tons of 60-lb. rail.

THE NEW YORK CENTRAL has ordered 30,000 tons of rails, dividing the order equally among the Inland Steel Company, the Illinois Steel Company, the Algoma Steel Company, the Bethlehem Steel Company and the Carnegie Steel Company.

SIGNALING

NORTHERN PACIFIC.—Commissioner F. B. McManamy, of the Interstate Commerce Commission, will hold hearings at St. Paul, Minn., beginning on April 20, on this company's application for relief from the commission's automatic train control order.

MISCELLANEOUS

THE GREAT NORTHERN has ordered three 88-in. locomotive boilers from the Baldwin Locomotive Works.

THE RICHMOND, FREDERICKSBURG & POTOMAC has placed an order with the Wayne Iron Works for 5,000 lin. ft. of iron fence and 2,500 lin. ft. of chain link

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fence. This is to be used for the construction of a fence 7,500 ft. along the east side of its Potomac yard.

THE DELAWARE, LACKAWANNA & WESTERN is asking for bids for its 1932 requirements of solid steel wheels.

THE NORFOLK & WESTERN has received bids for its requirements of locomotive steel tires from April 1 to June 30.

THE CHICAGO, ROCK ISLAND & PACIFIC has placed an order with the American Car & Foundry Co. for the installation of thermo gravity air-conditioning equipment in four dining cars, which will be placed on the Golden State Limited by June 1. The Rock Island expects later to extend the system to all dining cars on the system.

New B. & M. Cabooses Being Placed in Service

The first of 25 new steel cabooses now being constructed under a plan by which the Boston & Maine is providing 25,000 man-hours of labor for its shop workers, was recently placed in service. Between now and the last of May, the other 24 cabooses, which are being built at the Concord, N. H., shops of the B. & M., will be completed.

The new cabooses are providing at least part-time employment for all employees in the freight repair shops at Concord during the winter and spring. This schedule, by which about 90 men are employed at one time, will continue through April and May.

Slack traffic conditions and a surplus of freight cars in good condition would otherwise have resulted in the closing of the shops, the B. & M. says in a recent statement. At the same time through a substantial saving in construction costs, based on the present price for materials, the statement continues, the railroad has been able to make an appreciable saving.

Lackawanna Buys Material for Its Improvement Program

The Delaware, Lackawanna & Western, reported in the *Railway Age* of March 26, page 542, as carrying out improvements to provide employment for its forces, has placed orders with farmers and dealers at points along its lines in New Jersey, Pennsylvania and New York for 150,000 cross ties. Orders were also placed for 190 sets of heavy switch timbers and about 5,300 large-size, mixed and white oak bridge ties, involving approximately 1,200,000 board feet. Orders also have been placed for similar materials with plants located at off-line points.

This lumber will be hauled by the railroads to the creosoting plant at Paterson, N. J., and place that plant into operation. After being chemically treated this material will be distributed at points where it is to be used for renewals and betterments of plant.

The Lackawanna is also planning yard revision work which involves the extension of third and fourth main tracks and will result in the elimination of a number of grade crossings. This latter undertaking is expected to supply work for several hundred men for several months

Supply Trade

The Okadee Company and the **Viloco Railway Equipment Company** have moved their offices to the McCormick building, 332 South Michigan avenue, Chicago.

E. P. Blanchard, for the past 12 years with the **Bullard Company,** Bridgeport, Conn., as advertising manager and sales manager has been elected a member of its board of directors.

The Ashton Valve Company, Cambridge, Boston, Mass., about April 15, will move its New York City offices to larger quarters at 21 and 23 Albany street (90 West Street building). Increased stock and service facilities will be available at the new address.

At the annual meeting of **Fairbanks, Morse & Co.** on March 26, **Arthur Anderson,** president of Arthur Anderson & Co., Chicago, **Thomas McMillan,** president of the Canadian Fairbanks, Morse Co., Ltd., and **C. H. Poppenhusen,** an attorney at Chicago, were elected directors.

Frank R. Wheeler has been appointed special sales representative with headquarters at Chicago of the **Worthington Pump & Machinery Corporation,** New York. He will cover the mid-west territory, assisting the Worthington organizations in Chicago, St. Paul, Kansas City, St. Louis and Detroit.

William S. Wilbraham, in charge of the estimating and order department of **Lukenweld, Inc.,** division of **Lukens Steel Company,** Coatesville, Pa., since its organization in 1929, has been appointed assistant manager of sales. Mr. Wilbraham is a graduate in mechanical engineering of Drexel Institute in the class of 1925. He was with the American Bridge Company as an assistant engineer of erection until March, 1927, when he joined the sales department of Lukens Steel Company, being transferred to the Lukenweld organization when that division was formed.

The Stibloy Products Company, Inc., Koppers building, Pittsburgh, Pa., has taken over the assets of **Liquid Metal Products, Inc.,** Chicago, producers and distributors, under the Arent patents, of Stibloy, a corrosion-resisting metal compound in liquid form, which was developed to extend the life of galvanized surfaces by protecting them from the effects of atmospheric conditions. The officers of the Stibloy Products Company, Inc., control of which has been acquired by the **Koppers Products Company,** are: **J. N. Forker,** president; **S. H. Bell,** vice-president; **John D. Shaner,** secretary, and **S. T. Brown,** treasurer.

Joseph M. Brown has been appointed assistant general manager of the transportation and government division of the **American Hair & Felt Co., Dry-Zero Corporation** and the **Philip Carey Company,** with headquarters in Chicago. **James D. Baker** has been appointed chief engineer and **Arthur Worrall** has been appointed special eastern representative. In addition, the following local representatives have been appointed: **George A. Secor,** St. Louis, Mo.; **C. H. Doty,** Minneapolis, Minn.; **D. D. Grassick,** Cleveland, Ohio; **D. R. Warfield,** Philadelphia, Pa.; **Arthur Worrall,** New York and Philadelphia; **J. Dan Bowden,** Atlanta, Ga.; and **H. R. Poulson** and **A. C. Remmer,** Chicago. Mr. Brown was born at Albany, N. Y., on June 17, 1876, and attended Albany High School and Albany Military Academy. During his business career, he has been southern sales representative of the H. W. Johns Manufacturing Company, western sales representative of the Dressel Railway Lamp Works, western sales agent of the Elwell-Parker Electric Company and until recently was representative of the White Company in the sale of motor trucks and coaches to the steam railways.

At the monthly meeting of the directors of the **United States Steel Corporation,** New York, on March 29, **J. P. Morgan** asked the board to agree to his retirement from the chairmanship which he had assumed at the request of the board as an interim measure following the death of the late Judge Elbert H. Gary. **Myron C. Taylor,** a director and chairman of the finance committee was thereupon elected to the office of chairman with duties similar to those formerly exercised by the late Judge Gary, and Mr. Taylor has now assumed the full executive direction of the Corporation. Since Mr. Taylor's appointment as chairman of the finance committee in

Blackstone Studios

Myron C. Taylor

1927, he has been active in carrying out the reorganization program he devised. This latter contemplates the retirement of the bonds of the corporation and its subsidiaries, the modernization of plant facilities, the building of additional plants and the acquisition of desirable properties. Mr. Taylor was born on January 18, 1874, at Lyons, N. Y., and was graduated from Cornell University in 1894. He was educated in law but his chief interests have been in business. He was associated with the textile industry in New England and was for many years a prominent figure in various large enterprises. He is president or a director of a number of industrial organizations, also a director of the New

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York Central, a member of the executive committee of the Atchison, Topeka & Santa Fe, a director of the West Shore, the Lehigh & Wilkes-Barre Corporation, and the First National Bank of New York.

OBITUARY

Fred R. Shepherd, who retired as president of Crerar, Adams & Co., Chicago, in 1925, died in Highland Park, Ill., on March 21.

Samuel M. Curwen, president of the J. G. Brill Company, Philadelphia, Pa., and affiliated companies, died on March 29, at his home at Haverford, Pa., at the age of 72 years.

Percival Chrystie, chairman of the board of the Taylor-Wharton Iron & Steel Company, High Bridge, N. J., died at that place on March 26. Mr. Chrystie was born on May 31, 1864, at High Bridge. After leaving school, he began work with the steel company, serving as vice-president for 16 years, until 1923, when he was elected president of the company; he retired from active work two years ago because of ill health. Mr. Chrystie represented the fifth generation of the family which has been in control of the steel company since its organization before the Revolutionary war.

William L. Austin, former president and chairman of the board of directors of the Baldwin Locomotive Works, who died at his Rosemont, Pa., home on March 10, had been associated with the Baldwin works for about 60 years. He was born on September 22, 1852, at Philadelphia, Pa., and educated in the Central high school in that city. He began work in a patent attorney's office at Philadelphia in 1868. He subsequently served during the next year as draftsman with the Kensington Steam

William L. Austin

Engine Works and in 1870 he went with the Baldwin Locomotive Works serving consecutively as designer, engineer and vice-president until he became president in 1910, and was chairman of the board in 1911 and 1912. He remained as a director until 1930 of the Baldwin Locomotive Works and also of the Standard Steel Works Company. Mr. Austin was the inventor of a number of devices for locomotives.

Construction

Abilene & Southern.—The Interstate Commerce Commission has affirmed its original order of August, 1930, denying this company's application for permission to construct a line from Ballinger, Tex., southwest to San Angelo, 39 miles.

Boston & Maine.—This company is contemplating the construction of a new passenger station at Cambridge, Mass., to be located on Somerville avenue, across the tracks from the present building.

Delaware & Hudson.—The New York Public Service Commission has approved plans and cost estimates for the elimination of the Gansevoort-Butlers road and Fullerton street grade crossings of this company's line in Northumberland, N. Y.; has adopted an order determining that the Voorheesville-State Farm-Western turnpike highway shall be carried below the grade of the railroad in the village of Voorheesville, town of New Scotland, N. Y.; and has ordered a rehearing in a proceeding for the elimination of Cooks crossing of the D. & H. in Essex, N. Y.

Denver Pacific.—The Interstate Commerce Commission has assigned this company's application for a certificate authorizing the construction of a railroad from Denver to San Pedro harbor for hearing at Los Angeles, Cal., on May 10, before Examiner T. F. Sullivan.

Erie.—The Public Service Commission of New York has approved two bids submitted in connection with the elimination of the Whitcomb crossing of the Erie, on the Friendship-Belmont state highway one-half mile east of Belvidere station, Amity, N. Y. One, from the Bates & Rogers Construction Company, Cleveland, Ohio, covered the construction of superstructure and approaches; the other, from the Ingalls Iron Works, New York, the furnishing and delivery of structural steel.

Fort Worth & Denver Northern.—A contract has been awarded to Hamilton & Gleason, Denver, Colo., for crushing and loading about 200,000 cu. yd. of volcanic cinders near Folsom, N. M., for use as ballast on this company's line between Childress, Tex., and Pampa, which is now under construction.

Port of New York Authority.—A subcommittee of a joint committee appointed by the Long Island Ten-Year Plan Committee, the Pennsylvania Railroad and the Port of New York Authority is to undertake, in the near future, detailed engineering and traffic studies to determine the feasibility of the Port Authority's proposed freight tunnel from Greenville, N. J., under upper New York bay to Bay Ridge, Brooklyn.

St. Louis-San Francisco.—An agreement has been reached with the city of St. Louis, Mo., for consolidating the construction of an underpass for Wellington avenue with a bridge to carry this road's tracks across the River Des Peres, near its Lindenwood yard at St. Louis.

State of New York.—The Commissioner of Mental Hygiene of the State of New York has received from the Acme Railroad Construction Company, Cleveland, Ohio, a low bid of $25,937 for the construction of a spur track at the Harlem Valley state hospital, Wingdale, N. Y. There were 28 other bidders.

Terminal Railroad Association of St. Louis.—The City of St. Louis (Mo.) has applied to the Missouri Public Service Commission for permission to construct the proposed railroad approach to the St. Louis Municipal bridge across the Mississippi river, extending from a point in the Terminal Railroad Association's yards near Twelfth and Poplar streets to a connection with the railroad deck of the bridge near Eighth and Gratiot streets. It is planned to construct the project with funds advanced by the Terminal Association, which will be reimbursed by the city from bridge tolls.

Financial

Bangor & Aroostook.—*Annual Report.* —The 1931 annual report of this company shows net income after interest and other charges of $623,133, as compared with net income of $1,557,761 in 1930. Selected items from the Income Statement follow:

	1931	1930	Increase or Decrease
Railway Operating Revenues	6,885,199	8,365,757	—1,480,557
Maintenance of way	1,395,497	1,434,511	— 39,014
Maintenance of equipment	1,321,099	1,503,102	— 182.003
Transportation	1,750,800	1,997,747	— 246.946
Total Operating Expenses	4,899,630	5,350,237	— 450,608
Operating ratio	71.16	63.95	+ 7.21
Net Revenue from Operations	1,985,570	3,015,519	—1,029,949
Railway tax accruals	596,936	700,879	— 103,943
Railway operating income	1,388,323	2,314,202	— 925,879
Hire of freight cars	9,120	26,600	— 17,480
Joint facility rents	10,463	10,464	— 1
Non-operating income	70,612	139,206	— 68.594
Gross Income	1,458,936	2,453,408	— 994,473
Interest on funded debt	810,754	866,777	— 56,023
Total Deductions from Gross Income	23.072	27,038	— 3,966
Net Income	623,133	1,557,761	— 934,629

Baltimore & Ohio.—*Trust Agreement for Western Maryland Stock Approved.*— The Interstate Commerce Commission on March 28 approved a trust agreement for the transfer of the Western Maryland stock held by this company to the Chase National Bank as trustee pending a final decision as to its disposition. The commission, on January 13, 1930, held that the acquisition of the stock by the B. & O. was in violation of the Clayton anti-trust law and ordered it to divest itself of the stock in six months, but the period was extended several times and the last ex-

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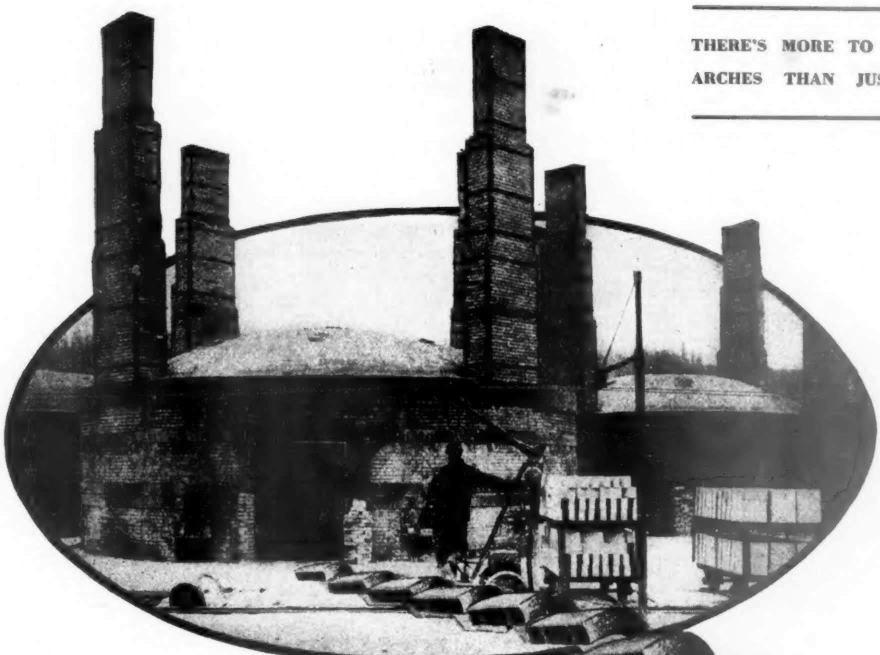
THERE'S MORE TO SECURITY ARCHES THAN JUST BRICK



Are YOUR Arches Modern?

MANY locomotives have been modernized by the application of stokers, syphons and other improvements.

When this has been done it is important that the locomotive Arch be checked by American Arch Company to see whether it needs changing to meet the new conditions.

The locomotive Arch is not just a pile of brick. It is an engineering specialty.

If it is to function efficiently it must be carefully designed with due regard for all the conditions encountered.

This has been the responsibility of American Arch Company engineers for 21 years. It is part of the Arch Brick service rendered the railroads.

HARBISON-WALKER REFRACTORIES CO.
Refractory Specialists

AMERICAN ARCH CO.
INCORPORATED
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tension order on July 7, 1931, provided that the stock should be trusteed. The B. & O. submitted a proposal and form of trust agreement and has now accepted certain modifications proposed by the commission. The trustee is directed not to vote the stock or the acquisition of the Western Maryland by the B. & O., and is instructed that at all times the stock shall be so voted as to preserve entire independence of directors and management between the two roads. If the commission shall authorize the B. & O. to acquire control of the W. M., or otherwise make it part of its system, as proposed in the four-system plan application now pending before the commission, the trust is to cease.

BONLEE & WESTERN.—*Abandonment.*—The Interstate Commerce Commission has authorized this company to abandon as to interstate and foreign commerce its line of railroad extending from Bonlee N. C., southwesterly 10.4 miles to Bennett.

BOSTON & MAINE.—*Bonds.*—The Interstate Commerce Commission has authorized this company to issue $7,500,000 of first mortgage 5 per cent bonds, series KK, to be pledged as collateral for short term notes.

BOSTON & MAINE.—*Annual Report.*—The 1931 annual report of this company shows net income of $3,377,280 after interest and other charges, as compared with net income of $5,727,530 in 1930. Selected items from the Income Statement follow:

	1931	Increase or Decrease
RAILWAY OPERATING REVENUES	57,784,978	—11,493,358
Maintenance of way	8,469,286	— 3,199,144
Maintenance of equipment	8,156,524	— 2,057,420
Transportation	21,817,056	— 3,182,133
TOTAL OPERATING EXPENSES	42,225,601	— 8,640,005
Operating ratio......	73.07	— 0.35
NET REVENUE FROM OPERATIONS	15,559,377	— 2,853,353
Railway tax accruals	3,175,457	— 356,339
Railway operating income	12,371,390	— 2,502,713
Hire of freight cars—Dr.	2,154,539	— 333,182
Joint facility rents...	246,983	+ 14,985
NET RAILWAY OPERATING INCOME.......	9,894,768	— 2,371,205
Non-operating income	1,365,723	— 96,854
GROSS INCOME.........	11,252,445	— 2,468,058
Rent for leased roads	1,134,149	— 4,767
Interest on funded debt	6,392,847	+ 54,661
TOTAL DEDUCTIONS FROM GROSS INCOME.....	7,875,165	— 117,808
NET INCOME..........	3,377,280	— 2,350,250
Disposition of net income:		
Income applied to sinking funds......	178,087	+ 3,674
Dividend appropriations of income....	4,022,205	— 1,695,278
Total appropriations of income	4,200,292	— 1,691,604
Balance transferred to Profit and Loss*..	823,012	— 658,646

* Deficit.

CHICAGO GREAT WESTERN.—*Abandonment.*—The Interstate Commerce Commission has authorized the Mason City & Fort Dodge to abandon, and the Chicago Great Western to abandon the operation of that portion of the former company's Lehigh branch extending from the crossing of the Fort Dodge, Des Moines & Southern (near Fort Dodge, Iowa) to the end of the branch at Lehigh, 12.1 miles.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—*Abandonment.*—This company has applied to the Interstate Commerce Commission for authority to abandon its line from Troy Center, Wis., to Elkhorn, 10.5 miles.

CHICAGO, NORTH SHORE & MILWAUKEE.—*Bonds.*—This company, which has applied to the Interstate Commerce Commission and the Reconstruction Finance Corporation for a loan of $1,150,000, has applied to the commission for authority to issue $2,722,000 of first and refunding mortgage 5½ per cent bonds, to be pledged as collateral for the loan. The application says that while it has always contended that it is not within the jurisdiction of the commission, and while the securities have been authorized by the Illinois and Wisconsin commissions, because of the expediency it asks the removal of the question of the validity of the bonds raised by the commission.

CHICAGO, ROCK ISLAND & PACIFIC.—*Abandonment.*—This company has applied to the Interstate Commerce Commission for authority to abandon its line from Trosky, Minn., to Jasper, 8.73 miles.

COLORADO & SOUTHERN.—*Abandonment.*—The Interstate Commerce Commission has authorized this company to abandon a 7.6-mile portion of its line into Boulder, Colorado.

ELGIN, JOLIET & EASTERN.—*Annual Report.*—The 1931 annual report of this company shows net deficit after interest and other charges, of $1,625,905, as compared with net income of $1,657,993 in 1930. Selected items from the Income Statement follow:

	1931	1930	Increase or Decrease
RAILWAY OPERATING REVENUES	13,342,164	21,807,616	—8,465,452
Maintenance of way	1,884,489	2,684,572	— 800,083
Maintenance of equipment ..	2,794,674	3,613,328	— 818,654
Transportation	5,805,065	8,427,443	—2,622,379
TOTAL OPERATING EXPENSES	11,323,072	15,573,475	—4,250,404
Operating ratio	84.87	71.41	+ 13.46
Railway tax accruals	1,304,831	1,357,450	— 52,618
Railway operating income...	713,975	4,876,505	—4,162,529
Equipment and Joint facility rents—Net Dr.	722,386	1,861,441	—1,139,055
NET RAILWAY OPERATING INCOME	* 8,411	3,015,064	—3,023,474
Non-operating income	211,952	310,265	— 98,313
GROSS INCOME.	203,541	3,325,329	—3,121,787
Rent for leased roads	932,665	1,293,422	— 360,757
Interest on funded debt..	500,000	500,000	....
NET INCOME....	*1,625,905	1,657,993	—3,283,899

* Deficit.

FORT SMITH & WESTERN.—*R.F.C. Loan.* The Reconstruction Finance Corporation announced on March 24 that it had made the loan of $162,000 to this company approved by the Interstate Commerce Commission on March 11.

GREENE COUNTY.—*R.F.C. Loan.*—This company has applied to the Interstate Commerce Commission and the Reconstruction Finance Corporation for a loan of $40,000, including $6,000 to pay the balance of the loan it received under Section 210 of the transportation act, and amounts to pay bills and purchase equipment.

MAINE CENTRAL.—*Annual Report.*—The annual report of this company for 1931 shows net deficit after interest and other charges of $63,386, as compared with net income of $1,112,099 in 1930. Selected items from the Income Statement follow:

	1931	1930	Increase or Decrease
Average Mileage Operated ...	1121.40	1121.40	— .02
RAILWAY OPERATING REVENUES	14,890,650	18,992,373	—4,101,723
Maintenance of way	2,293,736	2,839,347	— 545,611
Maintenance of equipment ..	2,474,924	3,588,727	—1,113,804
Transportation	5,966,698	7,026,639	—1,059,941
TOTAL OPERATING EXPENSES	11,553,751	14,345,945	—2,792,195
Operating ratio	77.59	75.54	+ 2.05
NET REVENUE FROM OPERATIONS	3,336,899	4,646,428	—1,309,529
Railway tax accruals	979,679	1,065,100	— 85,421
Railway operating income...	2,356,545	3,580,980	—1,224,435
Hire of freight cars—Dr. ...	169,137	153,141	+ 15,996
Joint facility rents	249,028	467,189	— 218,161
Non-operating income	392,272	487,630	— 95,358
GROSS INCOME.	2,748,817	4,068,610	—1,319,793
Rent for leased roads	731,632	758,749	— 27,117
Interest on funded debt..	1,251,427	1,270,797	— 19,370
TOTAL DEDUCTIONS FROM GROSS INCOME	2,812,203	2,956,511	— 144,307
NET INCOME...	* 63,386	1,112,099	1,175,485
Disposition of net income:			
Dividend appropriations of Income (Pref. Stock)	150,000	150,000	....
Income balance transferred to Profit and Loss	* 213,386	962,099	—1,175,485

* Deficit.

MISSISSIPPI EXPORT.—*R.F.C. Loan.*—The Reconstruction Finance Corporation announced on March 28 that it had authorized the loan of $100,000 to this company which had been approved by the Interstate Commerce Commission.

MISSOURI PACIFIC.—*R.F.C. Loan.*—The Interstate Commerce Commission on March 25 announced that it had approved on March 23 an additional loan of $12,800,000 to this company from the Reconstruction Finance Corporation to meet its requirements to May 1, including $5,850,000 to pay half of its bank loans due April 1, the other half to be extended by the banks, $2,150,000 to pay overdue vouchers for materials, supplies and services, $500,000 for advances to the New Orleans, Texas & Mexico and $300,000

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interest due April 1, $595,000 to meet instalments on equipment trust obligations, $2,400,000 to meet fixed interest obligations on May 1, and $1,005,000 to pay taxes due the states of Illinois and Arkansas. The company has previously received loans of $1,500,000 and $2,800,000, largely to meet interest payments, out of a total of $24,650,000 applied for to meet its requirements for the year. As security for the additional loan the commission required that it pledge $15,050,000 of first and refunding mortgage bonds, 114,750 shares of common stock of the Texas & Pacific, 1,600 shares of stock of the Fort Worth Belt, and $2,900,000 of bonds of subsidiary companies.

The loan was authorized by the R. F. C. on March 28.

Mound City & Eastern.—*Foreclosure Sale.*—A. S. Trux, Minneapolis, Minn., has purchased for $204,000, under foreclosure, the physical property of the Mound City & Eastern which extends from Leola, S. D., to Mound City, a distance of 56 miles. Mr. Trux of the Rand Company, bid in the property at a foreclosure sale at Leola as representative of holders of $203,381 of past due bonds. Operation of the railway will be continued unchanged.

New York Central.—*R.F.C. Loan.*—A loan of $4,399,000 to this company from the Reconstruction Finance Corporation, to be applied to the cost of completing the company's West Side improvements in New York city, was approved by the Interstate Commerce Commission on March 23. The funds are to be made available in monthly payments over a period of about a year and a half. On February 25 the New York Central had applied for a loan of $7,000,000 for this purpose but on March 9 it filed a revised application in which it reduced the amount to $4,399,000. As collateral the company is to pledge $7,335,000 of refunding and improvement mortgage bonds with the corporation. According to the report the Central on December 31 owed $64,500,000 on 5 per cent demand notes to the New York Central Securities Corporation, J. P. Morgan & Co., and eight banks, but "it is understood that, if the loan be granted, the present status of the bank loans situation will be maintained until the applicant is able to finance by other means." It is also stated that the company had represented that it could not finance the improvement expenditures through the sale of its bonds, except on a prohibitive basis, and "bankers are represented as being averse to making loans the proceeds of which are to be used solely for capital expenditures, and, according to the applicant's statement, the present policy of the banks is to use their cash resources for the relief of urgent and immediate requirements of industry and business." It is stated that the New York Central has as yet made no definite plan for applying to the Railroad Credit Corporation for a loan to meet interest payments but it has said that such a loan may be requested in the near future. The report includes a table showing that for the period 1921-1930 the company had an average balance after charges of $58,370,353, and that in 1930 it had a net income of $35,981,792, but that for 1931 it reported a net income of only $2,430,101 and it failed by nearly that amount, or $2,255,000, to earn its interest charges in January and by $1,755,000 in February.

New York, New Haven & Hartford.—*Annual Report.*—The 1931 annual report of this road shows net income after interest and other charges of $9,179,869, as compared with net income of $15,863,791 in 1930. Selected items from the Income Statement follow:

	1931	Increase or Decrease
Railway Operating Revenues	$100,331,094	—$18,554,421
Maintenance of way..	13,974,850	— 2,612,349
Maintenance of equipment	14,579,939	— 3,422,673
Transportation	34,097,184	— 4,133,920
Total Operating Expenses	69,113,722	—10,841,625
Operating ratio	68.89	+ 1.64
Net Revenue from Operations	31,217,371	— 7,712,797
Railway tax accruals	5,336,490	— 1,380,998
Railway operating income	25,873,010	— 6,317,301
Hire of freight cars—Dr.	2,536,939	+ 227,179
Joint facility rents...	4,621,605	....
Net Railway Operating Income.......	18,657,675	— 6,427,266
Non-operating income	6,744,012	— 222,674
Gross Income.........	25,401,687	— 6,649,939
Rent for leased roads	2,783,674	+ 22,718
Interest on funded debt	11,673,217	— 264,055
Total Deductions from Gross Income.....	16,221,818	+ 33,983
Net Income.........	9,179,869	— 6,683,922

Northern Pacific. — *Dividend.* — Directors of this company meeting on March 23 took no action on the quarterly dividend of 75 cents due on common stock at this time. They announced that dividends hereafter would be dealt with semi-annually, the next meeting for this purpose to be in June.

Norwood & St. Lawrence.—*Bonds.*—The Interstate Commerce Commission has authorized this company to issue $198,000 of first mortgage 6 per cent bonds to be sold or otherwise disposed of at not less than 95 to meet maturing bonds.

Pennsylvania.—*Pittsburgh, Ft. Wayne & Chicago Stock.*—The Interstate Commerce Commission has authorized the Pittsburgh, Ft. Wayne & Chicago to issue $27,750,000 of common stock to be delivered to the Pennsylvania in satisfaction of an equal indebtedness.

Reading.—*Dividend.*—Directors of this company have reduced the quarterly dividend on the $50-par common stock to 25 cents a share. Last quarter 50 cents was paid. Previously the quarterly rate was $1.

Roscoe, Snyder & Pacific.—*Final Recapture Report.*—The Interstate Commerce Commission has issued a final recapture report finding that this company earned excess income amounting to $340,655 in 1920, and 1921 to 1927, inclusive, and an order directing it to pay one-half the amount to the general railroad contingent fund.

St. Louis Southwestern.—*Bonds.*—The Interstate Commerce Commission has authorized this company to issue $39,599,750 of general and refunding mortgage 5 per cent series A bonds; to exchange at par as much of the issue as may be necessary for all or part of $9,000,000 of promissory notes and for bonds issued under liens prior to the general and refunding mortgage; and to pledge at a ratio to be determined later $18,830,000 of these bonds as collateral security for the notes.

San Antonio & Aransas Pass.—*Abandonment.*—This company has applied to the Interstate Commerce Commission for authority to abandon its line from Shiner Junction, Tex., to Gonzales, 21 miles.

Toledo Terminal.—*Tentative Recapture Report.*—The Interstate Commerce Commission has issued a tentative recapture report finding that this company earned $2,545,570 of excess income in the years 1920 to 1927, inclusive.

Union (Pittsburgh).—*Tentative Recapture Report.*—The Interstate Commerce Commission has issued a tentative recapture report finding that this company earned $4,578,218 of excess income in the years 1922 to 1926, inclusive, of which $2,289,109 would be recapturable.

Western Pacific. — *Securities.* — The Interstate Commerce Commission has authorized this company to issue $5,000,000 of notes and to pledge as collateral security therefor general and refunding mortgage series A bonds at the ratio of $125 of bonds for $100 of notes, and to exchange these notes at not less than par for an equal amount of the company's 5 per cent gold debentures. The company is also authorized, upon surrender of an outstanding note for $4,504,000, to issue in exchange another note of the same face amount to be secured by $5,630,000 of its general and refunding series A bonds—the total of notes outstanding at any one time not to exceed $5,000,000 and the collateral security not to exceed $6,250,000.

Wichita Falls & Southern.—*R. F. C. Loan.*—This company has applied to the Interstate Commerce Commission and the Reconstruction Finance Corporation for a loan of $800,000 to pay a promissory note to the First National Bank of Dallas for $250,000 and a note to Frank Kell for $550,000.

Wrightsville & Tennille.—*R. F. C. Loan.*—This company has applied to the Interstate Commerce Commission and the Reconstruction Finance Corporation for a loan of $39,530 to pay taxes, materials and supplies and interest.

Dividends Declared

Reading Company.—Common, 25c, quarterly, payable May 12 to holders of record April 14.

Average Prices of Stocks and of Bonds

	Mar. 29	Last week	Last year
Average price of 20 representative railway stocks..	26.45	29.09	83.39
Average price of 20 representative railway bonds..	66.48	69.10	92.54

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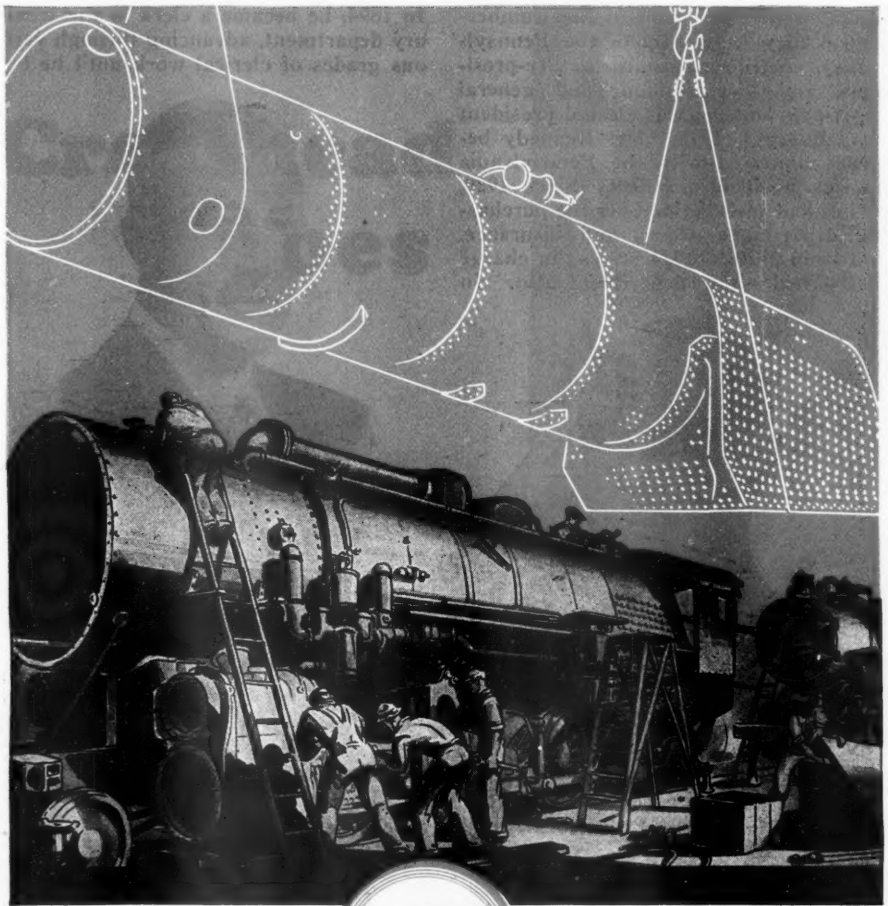

Railway Officers

EXECUTIVE

Charles D. Young has been appointed vice-president in charge of purchases, stores and insurance of the Pennsylvania, succeeding **M. C. Kennedy,** retired. Mr. Young was formerly assistant vice-president, same departments. He was born in Washington, D. C., in May, 1878, and is a graduate of Cornell University, beginning his railroad career in June, 1900, as a special apprentice on the Pittsburgh, Cincinnati, Chicago & St. Louis (now a part of the Pennsylvania system). He was advanced through successive grades in the motive power department until June, 1910, when he was appointed assistant engineer of motive power at Pittsburgh, Pa. In October, 1911, he became engineer of tests at Altoona, Pa., and in May, 1917, was promoted to superintendent of motive power at Wilmington, Del. Just before the armistice he was commissioned lieutenant-colonel of engineers for service in France, returning to railroad duty later in the same year. In 1919, he became superintendent of the Schuylkill division of the Pennsylvania; in March, 1920, general supervisor of stores, and in January, 1924, stores manager. Mr. Young was promoted to general purchasing agent in January, 1927, and continued to hold that position as well

Charles D. Young

as the position of assistant vice-president, following his further advancement in December, 1930.

Mr. Kennedy, vice-president and director, who will retire on April 1, under the company's pension regulations, was born in Chambersburg, Pa., and received his higher education at Princeton University, receiving the degree of civil engineer in 1884. His first business venture after graduating from college was cattle ranching on the Powder river, Wyo. In 1887, he went to Junction City, Kan., where he organized a banking firm. Two years later he became assistant to the president of the Cumberland Valley (now part of the Pennsylvania). After serving also as vice-president, and vice-president and general superintendent, he was elected president on January 1, 1913. Mr. Kennedy became connected with the Pennsylvania as vice-president, in 1919. Since 1920, he has had jurisdiction over the purchasing department, stores and insurance, and from 1920 to 1924 he was in charge of the real estate department also. In

M. C. Kennedy

1926, Mr. Kennedy was elected to serve as a director, in addition to his vice-presidential duties.

FINANCIAL, LEGAL AND ACCOUNTING

Effective April 1, the positions of assistant comptroller, valuation engineer, and auditor of capital expenditures, of the Gulf, Mobile & Northern, and the New Orleans Great Northern, were abolished. **C. W. Peterson,** assistant comptroller, has been appointed auditor of disbursements, and **F. N. Johnson,** auditor of disbursements, has been appointed auditor of receipts.

F. A. Bourne, superintendent of pensions and relief of the Canadian National, will retire on May 1, and will be succeeded by **C. R. MacKenzie**, office assistant to the vice-president in charge of finance and accounting. Mr. Bourne entered the service of the Grand Trunk (now part of the C. N. R) in Montreal, Que., in 1883. Since 1913 he has been connected with the pension department, and in 1923 he became superintendent of pensions and relief.

James A. Yates, general treasurer of the Canadian National, retired on April 1, and **Charles D. Cowie,** who has been assistant to the vice-president, has been appointed to succeed Mr. Yates as general treasurer. The position of assistant general treasurer is abolished and **H. G. Foreman,** who has held that position, has been appointed assistant to the vice-president, succeeding Mr. Cowie.

Mr. Yates was born at Montreal, Que., on November 30, 1876. He began his railroad career in June, 1891, as an apprentice-clerk with the Grand Trunk (now part of the Canadian National). In 1894, he became a clerk in the treasury department, advancing through various grades of clerical work until he be-

James A. Yates

came chief clerk in January, 1907. He served in that capacity until August, 1914, when he was appointed assistant treasurer, and in September, 1922, he was advanced to treasurer. Upon the merger of the Grand Trunk into the Canadian National he was appointed treasurer of the latter.

Mr. Cowie was born on July 25, 1887, and entered railway service with the Canadian Northern (now part of the C. N. R.), as clerk at Toronto, Ont., in 1910. After serving as cashier he did special work in connection with the Royal Commission on Railways and the Canadian Northern Arbitration Board. In 1918, he was appointed assistant to

Charles D. Cowie

vice-president of the C. N. R., at Toronto, and on the present organization of the Canadian National in 1923, he was transferred to Montreal as assistant to vice-president in charge of finance, the position he held until his recent appointment as general treasurer.

Mr. Foreman began his railroad career at Walkerville, Ont., as a clerk in 1898. He became clerk in the accounting department of the C. N. R. at Toronto, in 1903, and was successively chief clerk, chief accountant, assistant treasurer and treasurer at that point. When the present administration of the Canadian Na-

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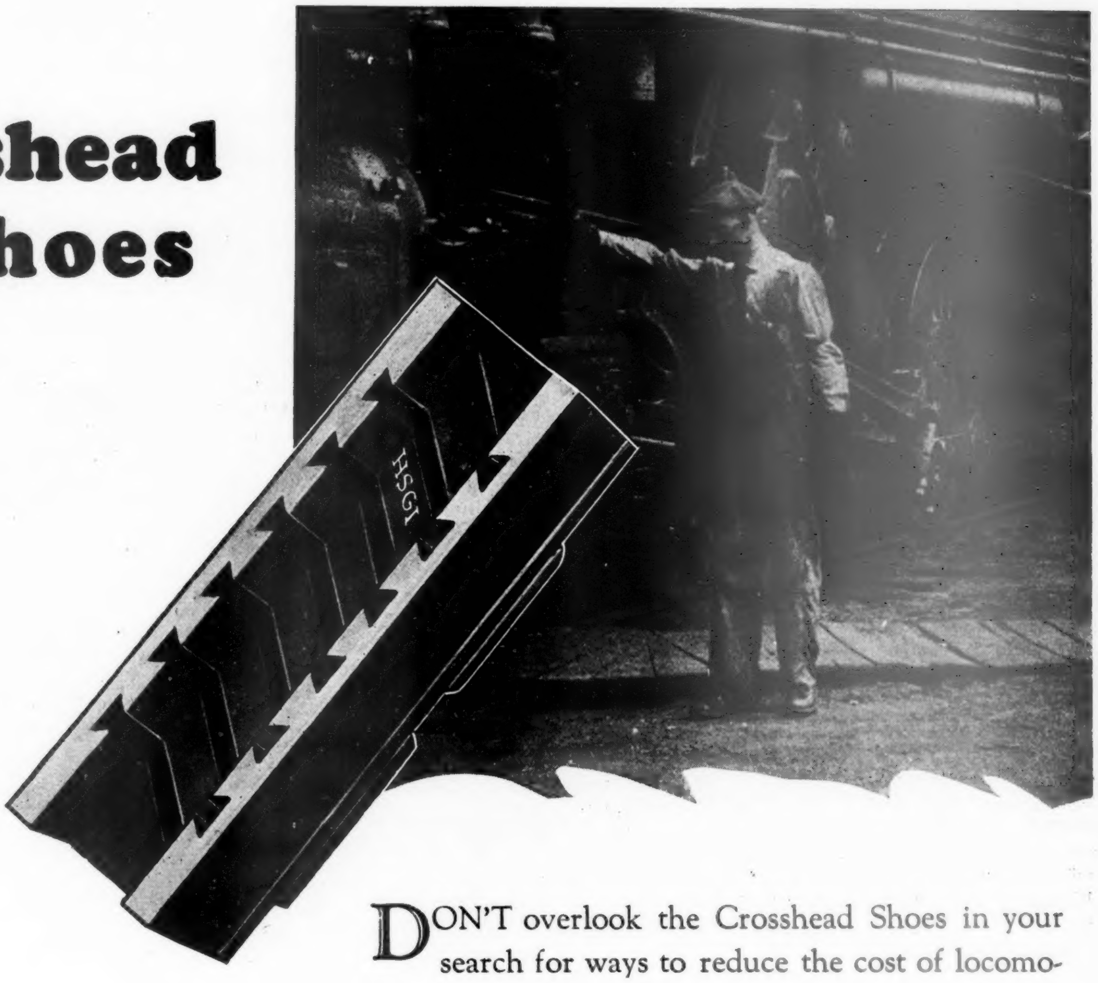
Crosshead Shoes



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tional was formed, Mr. Foreman was appointed assistant general treasurer of

Harry G. Foreman

the system with headquarters at Montreal, in which capacity he served until April 1, when that position was abolished, and he became assistant to the vice-president, financial and accounting departments.

J. F. Dartt, auditor of disbursements of the Illinois Central, has been promoted to assistant general auditor, with headquarters as before at Chicago, succeeding **S. J. Lawshe**, acting assistant general auditor, who has been appointed assistant auditor of freight receipts, at Chicago, a newly-created position. **A. E. Lawler**, chief traveling auditor, with headquarters at Chicago, has been appointed auditor of disbursements to succeed Mr. Dartt. **S. Anderson**, traveling auditor, with headquarters at Chicago, has been promoted to chief traveling auditor, to succeed Mr. Lawler. **C. C. Haire**, auditor of capital expenditures, at Chicago, has been transferred to the engineering department as engineer of capital expenditures, also a newly-created position, and the position of auditor of capital expenditures has been abolished.

OPERATING

Joseph S. Grear, district superintendent for the Pullman Company, at Omaha, Neb., has been transferred to Los Angeles, Cal., to succeed **O. W. Snoddy**, who has been transferred to New York.

The jurisdiction of **F. S. Risley**, superintendent of the Mohawk division of the New York Central, has been extended to include the Hudson division, and the jurisdiction of **M. E. Welch**, superintendent of the Electric division, has been extended to include the Harlem and Putnam divisions.

Frank W. Rourke, assistant freight traffic manager of the Boston & Maine, has been appointed general superintendent. Mr. Rourke formerly served also as general superintendent of the Mystic Terminal Company at Boston, which duties have been assumed by **David J. Hurley**.

E. O. Brown, acting assistant superintendent of the Los Angeles division of the Atchison, Topeka & Santa Fe, with headquarters at Los Angeles, Cal., has been appointed assistant superintendent at that point. Mr. Brown had been appointed acting assistant superintendent at Los Angeles to succeed **J. H. Gillette**, who six months ago obtained a leave of absence. Mr. Gillette has now resigned to enter private business.

J. T. Ellett, trainmaster of the Norfolk division of the Norfolk & Western, with headquarters at Crewe, Va., has been appointed superintendent of that division. **R. A. Nelson**, trainmaster of the Scioto division, has been transferred to the Norfolk division, succeeding Mr. Ellett. **J. F. McMullan**, assistant superintendent of the Scioto division, with headquarters at Portsmouth, Ohio, will take over Mr. Nelson's duties, and the position of trainmaster of the Scioto division will be discontinued.

The La Crosse division of the Chicago, Burlington & Quincy has been absorbed by the Aurora division, and that portion of the latter division between Eola, Ill., and Chicago, has been added to the Chicago division. The Beardstown division has been absorbed by the Galesburg division. **H. D. Brown**, superintendent of the Aurora division at Aurora, Ill., now has jurisdiction over the former La Crosse division, while **S. L. Fee**, superintendent of the latter division, with headquarters at North La Crosse, Wis., has been transferred to the Alliance and Sterling divisions, with headquarters at Alliance, Neb. Mr. Fee succeeds **H. C. Murphy**, who has been appointed to the newly-created position of assistant superintendent at North La Crosse. **G. L. Griggs**, superintendent of the Galesburg division, has been appointed superintendent of the combined Galesburg and Beardstown divisions, with headquarters as before at Galesburg, Ill., and **W. E. Haist**, superintendent of the latter division, has been appointed assistant superintendent, with headquarters as before at Beardstown, Ill.

TRAFFIC

K. B. Hannigan, assistant freight traffic manager for the Southern, with headquarters at St. Louis, Mo., has been appointed to the newly-created position of assistant traffic manager at that point, and the position of assistant freight traffic manager has been abolished.

J. H. Mangold, general freight agent of the Elgin, Joliet & Eastern, with headquarters at Chicago, has been promoted to traffic manager, to succeed **T. E. Bond**, who has been elected vice-president. **J. B. Davies**, assistant general freight agent, with headquarters at Chicago, has been promoted to general freight agent.

MECHANICAL

B. P. Phelps, engineer of shop extensions of the Atchison, Topeka & Santa Fe, with headquarters at Topeka, Kan., has taken over the duties of electrical engineer, and **A. B. Young**, who held that position, with headquarters also at Topeka, has been appointed assistant engineer of shop extensions at Los Angeles, Cal.

H. A. Finberg, locomotive engineman on the Lake Superior division of the Northern Pacific, has been promoted to assistant fuel supervisor on the lines east of Paradise, Mont., with headquarters at Livingston, Mont., to succeed **F. J. Regan**, who has been assigned to other duties.

OBITUARY

Thomas Scully, general traveling storekeeper for the Atchison, Topeka & Santa Fe, with headquarters at Topeka, Kan., died on March 24, at his home in that city.

C. W. Seddon, superintendent of motive power of the Duluth, Missabe & Northern, with headquarters at Proctor, Minn., died on March 21, at his home at that point, after a long illness.

William B. MacKenzie, who retired in 1914 as chief engineer of the Intercolonial Railway, (now part of the Canadian National), died at Daytona, Fla., on March 16, after a short illness. Mr. MacKenzie was born on February 16, 1847, at Kenzieville, Pictou county, N. S., and studied engineering at Pictou Academy. He entered railway service in 1872, as an office assistant in the engineer's office of the Intercolonial at Halifax, N. S. In 1879, Mr. MacKenzie was promoted to assistant engineer, being further advanced to chief engineer, with headquarters at Moncton, N. B., in 1897.

Joseph W. Wise, general freight claim agent for the St. Louis Southwestern, with headquarters at St. Louis, Mo., died on March 21, at his home in Kirkwood, Mo., of heart disease. Mr. Wise was born on March 7, 1864, at Alton, Ill., and after serving with the Missouri Pacific as a claim clerk at St. Louis and later with the Texas & Pacific at Dallas, Tex., he entered the service of the Cotton Belt on October 1, 1901, as a claim clerk. From July 1, 1902, to December 31, 1910, he was chief claim clerk, being promoted to freight claim agent on the latter date. Mr. Wise served as head of the freight claim department from that time until his death, his title being changed to general freight claim agent on January 1, 1930.

Paul B. Spencer, engineer of structures of the New York, New Haven & Hartford, with headquarters at New Haven, Conn., died suddenly at his home in that city on March 26. Born at Boston, Mass., on October 6, 1881, and educated at the Worcester Polytechnic Institute, Worcester, Mass., Mr. Spencer entered railway service as a draftsman with the New York, Ontario & Western at Middletown, N. Y., in 1902. On November 20, 1905, he entered the employ of the New Haven, and had since been continuously connected with that company, except for about one year when he was engaged in railroad construction in Florida on the Charlotte Harbor & Northern (now part of the Seaboard Air Line). He was appointed engineer of structures of the New Haven on October 1, 1920.